In the Middle of the Corrupting Sea: Cultural Encounters in Sicily and Sardinia between $1450-900\ BC$

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Abstract

Archaeological investigations of pre-colonial contacts in Sicily and Sardinia during the Middle and Late Bronze Age (15th – 10th centuries BC) often represent such encounters as both systematic and highly influential in the development of islander societies. Discussions of the involvement and impact of Aegeans and Cypriots dominate these investigations of cultural encounters. Such studies typically discuss networks of exchange from the extrainsular perspective, focussing on trade routes and provenience analyses, which almost always involve mobile foreigners coming to these islands to establish economic relationships with passive, receptive, and stationary islanders.

The dominance of these 'acculturation' interpretations, while understandable within the context of the history of Mediterranean archaeology, is nonetheless unfortunate, as eastern Mediterranean material consistently represents only a small fraction of material assemblages throughout the region. Often it is assumed that foreigners controlled such contacts, based on the assumption that members of a more complex society will dominate those of a simpler one. There seems to be little room, however, for interpretations which involve mobile, enterprising or self-aware Sicilians and Sardinians during this timeframe, even when it is recognised that trade networks (e.g. of Sardinian obsidian) had existed in the region since the Neolithic period. Similarly, local motivations for establishing or maintaining contacts are often ignored.

My thesis employs a postcolonial perspective, even though dealing with a precolonial period. Postcolonial archaeology, however, need not be exclusively concerned
with re-analysing the archaeology of colonisation, but also re-assessing the scholarship
which is a by-product of the colonialist representations, such as the over-representation of
contacts with eastern Mediterranean peoples, and their supposed cultural superiority.

Instead, three themes of representation are employed: (1) the investigation of materials
from a local, consumption-based perspective; (2) the abandonment of simplistic dualist
paradigms; and (3) the recognition of the hybrid productions and practices which result
from these material connections. These perspectives give a more accurate assessment of
local agency, illuminate the involvement of other possible participants in the central
Mediterranean, and analyse how the consumption of foreign and hybrid materials affected
the development and promotion of islander identities. There is an active separation made
between the presence of foreign objects and that of foreign peoples, and as a result, the
cultural encounters described are interpreted as instances of object diasporas, rather than
physical encounters.

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List of Accompanying Material

1. CD-ROM containing: Central Mediterranean Exotica (Access file)

Sardinia Eastern Connections (PDF)

Sardinia Western Connections (PDF)

Sardinian Foreign Metals (PDF)

Sardinian Foreign Pottery (PDF)

Sicily Eastern Connections (PDF)

Sicily Western Connections (PDF)

Sicilian Foreign Metals (PDF)

Sicilian Foreign Pottery (PDF)

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Anthony Russell January, 2011

Author's Declaration
I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.
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Signature:

Printed name: Anthony Russell

1 Introduction and Past Research

1.1 Introduction

Despite being geographically insular, islands have long been noted as areas of conspicuous cultural encounters. Sicily and Sardinia, the two largest islands of the Mediterranean, and placed centrally within that sea, have yielded an increasing amount of archaeological evidence for having been in "in the swim" of extra-insular exchange networks (Horden and Purcell 2000: 76) between 1450 – 900 BC. These absolute dates refer to the entire Middle Bronze Age (hereafter MBA) in Sicily, as well as that island's Late Bronze Age (LBA) (see table 1.1, p. 33). In Sardinia, this chronological range reflects the end of the MBA and the entire LBA, typically regarded as the cultural "highpoint" of the island's Nuragic civilisation (Webster 1996: 108). Beyond the recognition of extra-insular materials and influences on these islands, however, there have been lively debates regarding the significance of such contact, both in terms of who the agents of interaction were, and the scale of impact these material connections had upon islander societies. These debates have been argued along a spectrum from those who feel such contacts were direct, systematic, and highly influential (Tusa 1999a: 534; Castellana 2002: 131; Rowland 2001: 65) to those who consider such encounters to have been sporadic, informal, and without much impact upon the lives of islander communities (Webster 1996: 142; Blake 2008). In the former framework, external influences upon these islands are the prime movers of social development, and the principal impetus for material change (Leighton 2005: 261; Rowland 2001: 65). At either end of this contact and influence spectrum, discussions of the involvement of Aegeans (usually termed Mycenaeans) and Cypriots dominate the study of cultural encounters in Sicily and Sardinia. Such investigations usually discuss networks of exchange from the extra-insular perspective, concentrating on trade routes and provenience analyses, and typically involve mobile foreigners coming to the central Mediterranean, and establishing economic relationships with passive, receptive, and stationary islanders (Lo Schiavo 2003: 23; Rowland 2001: 58). The end result is the acculturation of Sicilian or Sardinian societies to a more Aegean or Cypriot way of life (Tanasi 2009: 51; De Miro 1999a; Ferrarese Ceruti et al. 1987: 26-27).

The dominance of these eastern Mediterranean-focussed studies, while understandable within the context of the history of Mediterranean archaeology, is nonetheless unfortunate, as Aegean and Cypriot material consistently represents only a small fraction of the material assemblages throughout the region (Blake 2008: 9-10;

Vagnetti 1999: 141). Often it is assumed that Aegean merchants and prospectors controlled such contacts, expressed explicitly or implicitly within the framework of a Bronze Age world system (Marazzi and Tusa 1979; Vianello 2005: 8), in which eastern agents sought access to raw materials, such as metal ores in Sardinia and the western Mediterranean (Ferrarese Ceruti and Assorgia 1982: 171; Cline 1994: 79; Cunliffe 2001: 262). Assumptions of foreign control in these contact situations, however, are rooted in outdated diffusionist ideas, which propose the existence of an "Aegean evil genius" as the driving force of social complexity in the central Mediterranean (Blakolmer 2005: 661). From such a perspective, there is little room to discuss mobile, active, or influential Sicilians and Sardinians, even when it is recognised that independent, regional exchange networks (e.g. of Sardinian obsidian) had existed across the Tyrrhenian Sea since the Neolithic period. There is very little engagement with local motivations for contact, or what value and significance foreign objects had for the communities of these islands, beyond the presumption that such exotica caused them to acculturate to a more eastern Mediterranean way of life through their intrinsic superiority.

1.2 Research Aims

In order to critically evaluate the representation of cultural encounters between indigenous Sicilians or Sardinians and other Mediterranean peoples, this study pursues four principal research goals. The first is the comprehensive collection of the evidence for contact from Sicily and Sardinia, and its incorporation into a database (see 2.2.1 and the included Access file). With this data in hand, the second aim is to examine the strengths and weaknesses of the foreign-first perspective that has characterised the analysis of this evidence. The third aim is to challenge the dominant analysis, and attempt an interpretation of the spread of foreign materials from a local, consumption-based perspective, to show how an acculturation framework does not work when these objects or influences are restored to their appropriate archaeological contexts. Finally, based on current material culture theory in post-colonial studies, this investigation interprets the mixing of production methods and social practices as instances of hybridisation, instead of acculturation, or debased imitation.

The collection of data specifically involves gathering together every published piece of interpreted exotica found on Sicily and Sardinia for the MBA and LBA. In most cases this involves mobile foreign goods (e.g. pottery, bronze objects), although their identification as foreign is not always a straightforward procedure, and some of the

evidence involves an interpretation of the objects involved as exotica. Beyond such mobile goods, this study also investigates interpretations of foreign influence upon the material practices of islander communities (e.g. architectural forms, imitative or derivative pottery). While such items 'of influence' also represent a subjective interpretation of extra-insular contact rather than direct evidence, they are often presented in acculturation frameworks as established facts. As these influenced material expressions are only the by-products of contact, however, and are usually interpreted as the handiwork of locals (i.e. rather than the productions of any itinerant artisans), they do not appear in the database of exotica, although they are presented in the data chapters, and evaluated in the discussion chapter. Accumulating evidence for contact with the Aegean and Cyprus is much easier than gathering data for contact with the western Mediterranean or, more troublingly, proof of material connections and cultural encounters within the central Mediterranean itself, as eastern Mediterranean materials are more widely published and referenced.

An analysis of the dominant acculturation interpretation of culture contact in Sicily and Sardinia is largely a study of its limitations, or in other words, what is missing from such a homogenising perspective. This includes: local motivations for establishing or maintaining contact; a contextual analysis of how foreign objects and influences were appropriated and, at times, physically adapted to accommodate local needs and values; a consideration of the mobility of islanders themselves in the spread of exotica throughout the region; and addressing what the benefits acculturating to foreign practices would have been for islander societies. In Chapter Two, I discuss the benefits of hybridisation over acculturation in the interpretation of MBA and LBA cultural encounters (2.1.1), and how an acculturation framework leads to inflexible, dualist paradigms of contact (2.1.3), such as active, enterprising foreigners versus passive, receptive locals. In the final chapter I describe some of the discourses employed towards the maintenance of the acculturation framework.

The rejection of Mycenaean or Cypriot acculturation as an appropriate interpretation of cultural encounters in these islands leads directly to the third research aim: analysing the evidence from a consumption-based perspective. This is essentially 'filling in the blanks' of what is missing from the dominant paradigm. When looking at these materials in their local, archaeological contexts, new ideas about appropriation and adaptation can be addressed, as foreign objects and influences are read as active expressions of local needs. This is a study of not only what is accepted from cultural encounters, but also what is purposefully rejected. The adoption of foreign materials, practices, or ideas and their

adaptation to suit local needs can better inform us of the kinds of negotiations taking place than any assumption of common meanings shared between producer and consumer. From this locals-first perspective, a more informed discussion of the identity implications for islander societies is possible, which moves beyond the simplistic and limited notion that they merely wanted to be more Aegean or Cypriot. In Chapter Two, I discuss consumption choices as a critical feature of social identity formation (2.1.2). In the conclusion I propose a more inclusive model of the types of cultural encounters that existed in Sicily and Sardinia for this 550 year period, one that can accommodate the presence of foreign agents, but does not insist upon it, and certainly does not rely upon extra-insular presence to explain the material culture trajectories of islander communities.

Finally, I apply the interpretive model of hybridisation to certain material changes detected at discrete points of contact in Sicily and Sardinia, to show how such an interpretation is inevitably more satisfying than that of the imitation, or corrupt derivation, of foreign material culture. It allows for the consideration of local systems of value, which is crucial in a contact scenario where the local voice would always have been dominant, and where any foreign agents would likely have been accommodating - if not subordinate – to islander elites, regardless of whether they were the representatives of a more complex society. Hybrid products and hybrid practices are more commonly used to describe colonial cultural encounters, and the types of daily, intensive meetings and mixings that result from the persistent co-presence of indigenous peoples and colonisers. There is no such scenario of intensive co-presence in Sicily and Sardinia before the 1st Millennium BC. and as a result it is inappropriate to speak of hybrid corporate identities (e.g. 'Mycenaeanised' Sicilians) as a consequence of these pre-colonial encounters. Hybrid productions and practices, however, are still possible outcomes of the more transitory contacts encountered during the MBA and LBA, and do not result from the co-presence of different peoples per se, but rather through the globalisation of certain material forms (Knapp 2008: 57) throughout the Mediterranean in the second half of the 2nd millennium BC, phenomena that are described as 'object diasporas' in this study.

Sicily and Sardinia represent worthwhile subject matter for the study of cultural encounters, not only because islands are often conspicuous areas of contact (Knapp 2008: 20), but also because they are the two largest islands, in discrete parts of the centre of the Mediterranean, and what can be gleaned from their examination has direct repercussions on other regions of the 'corrupting' sea (Horden and Purcell 2000). They also contrast with each other in significant ways, in terms of temporal patterns of contact, the material

connections they describe, and the degree to which insularity has contributed to their distinct islander identities. What follows is a review of the developing interpretations of culture contact in MBA and LBA Sicily and Sardinia, first looking at syntheses of the central Mediterranean region as a whole, before examining interpretive movements for each island individually. A more comprehensive overview of the specific materials and sites implicated in culture contact studies of these two islands is provided in their respective data chapters (see 3.2 and 4.2).

1.3 Background

1.3.1 Central Mediterranean Syntheses

In this study, the term 'central Mediterranean' geographically refers to the area that extends west to east from the west coasts of Sardinia and Corsica to the Adriatic Sea, and north to south from the northern coast of the Adriatic to the northern coasts of Tunisia and Libya (figure 1.1). It therefore encompasses the two islands specifically under investigation, as well as Corsica, Ustica, the Aeolian Archipelago, the Flegrean Islands, peninsular Italy, Malta, and Pantelleria. Consequently, the western Mediterranean refers to the Balearic Islands, the south coast of France, and the Iberian Peninsula, and the eastern Mediterranean pertains to the Aegean, Anatolia, Cyprus, the Levant, and Egypt. Within the context of the central Mediterranean, therefore, Sardinia represents the western extremity, while Sicily is very centrally located.

There is a clear predominance of studies that involve Aegean interaction in the central Mediterranean, largely based on the presence of Late Helladic painted pottery (Taylour 1958; Biancofiore 1967; Marazzi and Tusa 1979; Smith 1987; Bietti Sestieri 1988; Vagnetti 1993, 1999; Ugas 1996; Jones et al. 2002; van Wijngaarden 2002: 203-59; Vianello 2005). An early theme in such investigations was the idea that there could be Mycenaean colonies in the central Mediterranean, such as Taylour's (1958: 128) suggestion that Scoglio del Tonno (Puglia) was a Rhodian colony, or Bernabò Brea's (1957: 126, 148) diffusionist ideas about the Anatolian origins of the Early Bronze Age (EBA) Castelluccian culture of Sicily, how the contemporary Capo Graziano culture was the by-product of Aegean immigration to the Aeolian Islands, and how the Wessex culture in southern England "strongly permeated with Mycenaean influences." These colonisation and migration interpretations were derived from condensing several materials and processes, ascribable to a wider time frame, into an historical occurrence (Leighton 1999: 138), as well as the attempt to associate archaeological remains with semi-legendary events

described by much later ancient authors (see 1.3.2). In step with this interpretation of Aegean colonies, was the early notion that these Mycenaeans had a civilising effect on the barbarian societies of the central Mediterranean (Orsi 1895: 149). While the existence of colonies has largely been dismissed (see below), the importance of Aegean contacts to the social development of central Mediterranean communities has been resistant to any qualification (Castellana 2000: 166; La Rosa 2004: 30-34; Tanasi 2009: 51).



Figure 1.1: Map of Sicily and Sardinia within their central Mediterranean context.

The idea of a settled Aegean presence was severely qualified after more extensive excavations failed to turn up any central Mediterranean assemblages that were even predominantly Aegean (Vagnetti 1999: 141; Blake 2008: 1; Militello 2004a: 298). A more recent idea was that certain sites could have contained Aegean community colonies (Smith 1987: 157-61; Kilian 1990: 455-56), where part of an indigenous settlement was assigned to foreign traders or artisans, who were still largely dependent upon locals for food, supplies, and labour. This was based on an analogy with Portuguese trading enclaves in Africa and Asia beginning in the 15th century AD, as well as Assyrian enclaves in Anatolia during the 2nd Millennium BC (Smith 1987: 148-55). Such an idea still has some currency in southern Italy, where the settled presence of itinerant Aegean potters, perhaps associated with but distinct from Aegean traders, has been postulated (Jones et al. 2005: 543). There is no site in the central Mediterranean, however, in which a community colony or trading enclave has been identified archaeologically. Even without enclaves, the notion of the systematic presence of eastern Mediterranean maritime merchants and prospectors as the principal agents in the spread of foreign exotica has been maintained, and is still the dominant paradigm of culture contact in the region (Blake 2008: 2, 6; Bietti Sestieri 1988: 24), despite the problems posed by more recent archaeometric data.

The first serious challenge to the dominant model of Aegean presence and activity came with the discovery that a significant portion of Late Helladic pottery in the central Mediterranean was manufactured from local clays. Local manufacture had been hypothesised before, based on typological considerations and direct observation (Taylour 1958: 164). The earliest physico-chemical studies occurred in the 1960s, with the comparison of clays used in Late Helladic-looking pots from Scoglio del Tonno, Rhodes, and the Peloponnese (de Angelis et al. 1967), although this limited study only confirmed that the six Italian sherds analysed were imports. With the expansion of provenience investigations by the Fitch Laboratory (British School at Athens) to include more sites from other parts of the central Mediterranean, it became clear that a significant portion of these Aegean-looking pots had been made locally (Jones 1986; Jones and Day 1987). If locals were making convincing looking imitations of Late Helladic pottery, then the notion of a Mycenaean penetration of Italy and the islands may have been overestimated, and what was really being observed was a transfer of technologies, and a developing taste in painted pottery (Harding 1984: 229). Still, these ceramic imports and technologies were typically described as having been exported by Aegean agents, be they maritime merchants or travelling artisans (Jones and Vagnetti 1991: 140-41; Jones et al. 2002: 171; Loney 2007: 198-200). Few scholars have outright questioned how much of an Aegean presence

was necessary to explain the spread of eastern Mediterranean materials within the central Mediterranean (Harding 1984: 282; Knapp 1990: 142-43; Gillis 1995: 62; Blake 2008). Such an idea of the spread of objects independent of agents of exchange from the same region, however, is considered an extremist view by the proponents of Aegean or Cypriot presence (Militello 2004a: 298).

Other material connections in the central Mediterranean have received significantly less attention, even though the actual amount of data is comparable. There have been limited attempts to catalogue western Mediterranean connections (Lo Schiavo 2003; Santos Velasco 1997; Cultraro 2005). Even when such connections are noted (e.g. similar bronze forms in Sicily and Spain), they are commonly represented as eastern Mediterranean innovations that subsequently spread west via central Mediterranean middlemen (Giardino 1995: 323; Rowland 2001: 58). While a mobility role for central Mediterranean communities is certainly refreshing, the fact that such connections are rarely studied independent of some notion of eastern influence or interest is again indicative of the emphasis placed on eastern actors. Even connections within the central Mediterranean (e.g. between Malta and Sicily) have been described as being predicated upon the presence of eastern Mediterranean goods (Tanasi 2008: 81-82).

Aegean-focused studies are not surprisingly the ones that strongly emphasise the influence of foreigners upon the central Mediterranean, based on a presumption of the superiority and dominance of Mycenaean civilisation (Bietti Sestieri 1988: 23-24). How coming from a more complex Aegean society actually benefits a limited number of merchants or craftsmen at some distance from their homeland is never explained: 'high' culture, it is presumed, has the intrinsic ability to influence and civilise 'barbaric' societies (Dietler 2005: 56). Such notions inevitably derive from ex oriente lux diffusionist models, where western societies are taught how to be civilised and urban by those coming from the Aegean and the Near East, and where all complex expressions found in the western and central Mediterranean (e.g. monumental architecture, metallurgy) are interpreted as eastern introductions (Dyson and Rowland 2007: 54; Voza 1985: 543). This is a common theme in the interpretation of cultural encounters during other periods of Mediterranean history, although such a proposition would seem to be challenged by the observation that traders and craftsmen in prehistoric societies were often of low social status, regardless of the practical or important functions they served (Manning and Hulin 2005: 271). The ability of such mobile peoples to influence or instruct host societies, let alone control them, must have been severely restricted.

The proponents of this Aegeanocentric perspective are more likely to posit the direct, physical presence of Mycenaean agents in Sicily and Sardinia (e.g. Ferrarese Ceruti 1997a; De Miro 1999b; Tomasello 2004), largely based on the presence of painted pottery and other luxury items (e.g. amber beads). Bietti Sestieri (1988: 23-24) noted over twenty years ago, however, how it was scholars working in Italy who tended to stress a Mycenaean impact in the central Mediterranean, while those who studied Mycenaean society in Greece more readily acknowledged the agency of indigenous populations. In the past thirty years some scholars have proposed a role for Cypriot objects and agents (Lo Schiavo *et al.* 1985; Knapp 1990; Vianello 2005: 7). Imports from Cyprus, however, are usually interpreted as part of an Aegean trade with the west (Lo Schiavo *et al.* 1985: 63), rather than evidence of direct contact between Cyprus and the central Mediterranean. This is certainly a more plausible scenario than the interpretation of Cypriot agents bringing Aegean goods to the region (Holloway 1981: 87), as the amount of Aegean imports consistently outnumbers the meagre amount of Cypriot data (Blake 2008: 3). The key exception here is Sardinia (see below), where Cypriot interaction has largely replaced earlier proposals of Aegean contact.

A minor theme in central Mediterranean cultural encounters, and one that actually allows for the mobility of central Mediterranean peoples, involves the proposed connection between certain Sea Peoples groups with specific areas around the Tyrrhenian Sea (Grosjean 1966: 194-95; Sandars 1985: 198-99; Rowland 1987: 80; Stager 1995: 335; Zertal 2001). These connections, all based on toponymic similarities, equate the *Sherden* with Sardinia, the *Tjekker* (or *Sikels*) with Sicily, and, to a lesser extent, the *Tursha* with Etruria. Despite any broad similarities in these names, there is very little material basis for connecting resident eastern Mediterranean peoples with these islands before the establishment of Phoenician settlements in the 9th or 8th centuries BC (Webster 1996: 142-43), nor is there unambiguous Sicilian or Sardinian material in the Levant. Furthermore, it is not readily apparent what materials should be used as comparanda in the east, as the few *Sherden* or *Tjekker* artefacts proposed are posited as tentative guesses (Tubb 1998: 98-100), or have been assigned in a very arbitrary way (Stern 2000). Nevertheless, this connection is still debated today, and the presence of central Mediterranean peoples in the Levant proposed (Boileau *et al.* 2010).

In sum, representations of the cultural encounters in the central Mediterranean during the MBA and LBA can be characterised as an increasing qualification of the intensity of eastern Mediterranean presence interpreted (colonies, enclaves, itinerant individuals, maritime merchants and prospectors), but without any corresponding qualification of the social impact of such encounters. This regional pattern certainly holds true for the island of Sicily (1.3.2), although in Sardinia (1.3.3) there is more scepticism regarding the impact of extra-insular encounters upon social and material change.

1.3.2 Cultural Encounters in Sicily

Contact with the Aegean is more materially evident in Sicily than in Sardinia (Vianello 2005: 207, tab. 8), and archaeologists working on the island have accordingly stressed greater involvement for Mycenaean traders, including a primary role in social development (Leighton 2005: 261). While there is still not a comparable amount of data such as that encountered in southern Italy (van Wijngaarden 2002: 205-206), many scholars continue to propose an Aegean presence in Sicily (La Rosa 2004), and occasionally actual settlement (De Miro 1999b: 448; Castellana 2002: 123; Kilian 1990: 455-56). The broad pattern of interpreted Aegean presence, based on the distribution of Late Helladic pottery, follows the same trajectory as the central Mediterranean region at large: a move from colonies to enclaves to maritime exchanges (Militello 2004a: 296). By the end of the LBA in Sicily (12th – 10th centuries BC, roughly contemporary to the *Bronzo Finale* (FBA) period on the Italian mainland), there is more certain material evidence for migration to the island, albeit from Sub-Apennine/Proto-Villanovan Italy rather than from the eastern Mediterranean (Albanese Procelli 2003b: 35). This movement has been associated with the semilegendary Sikel migration, which Bernabò Brea (1957: 149-50) dated to the 13th century BC, based on his interpretation of ancient sources.

Accounts of Italian peninsular peoples moving into Sicily and the Aeolian Islands have been heavily shaped by the written accounts of later historians, such as Thucydides, Diodorus Siculus, Hellanicus, and Philistus, who described the movements of groups such as the Ausonians, Sikels, Sikans, Elymians, and Morgetes (Leighton 1999: 215). Unlike the relatively unified culture of contemporary Sardinia (but see Blake 1999 for a qualification), greater material regionalisation has been observed in LBA Sicily, and there have been several attempts to associate particular regional assemblages to historically named groups (e.g. Bernabò Brea 1957: 147; La Rosa 1989; Tusa 2000a). These corporate groups are described as having resulted from the migration of different peoples to discrete regions of the island, thereby establishing the various peoples who would be encountered by later Greek or Phoenician colonists (Bernabò Brea 1957: 149; Albanese Procelli 2003b: 23). Such studies and their conclusions have been unsatisfying, however, and no association of materials and corporate groups has been accepted (Leighton 1999: 217),

based as they are upon a lack of understanding of the relationship between material expressions and 'ethnic' identity (Albanese Procelli 2003b: 18-19).

In terms of broad site distribution patterns, the traditional model of Sicilian settlement stresses a sharp reduction of sites in the MBA (1450 -1250 BC), reflecting a process of synoicism: a coalescence of habitation into proto-urban, mostly coastal settlements (Holloway 1985: 393). Such a process is then linked to the increase in eastern Mediterranean objects in Sicily: islanders were attracted to the coast by the potential to participate in these extra-insular networks (Tanasi 2009: 51-52). Then, in the LBA (beginning in the middle of the 13th century BC), there is an abandonment of coastal sites, particularly in the southeast, in favour of more easily defensible inland hilltop settlements (Bernabò Brea 1957: 149). Materially, the transition to the LBA is defined not only by these settlement shifts, but also by a break in cultural continuity from the MBA. Changes include new burial practices and new architecture, and shifts in craft production, all of which are associated with the incursion of new peoples to Sicily from the Italian mainland (Albanese Procelli 2003b: 28; Leighton 2005: 277-78). These population movements coincide with a sharp downturn in exchange with the eastern Mediterranean (Leighton 1996b: 101). This break in cultural continuity is not as evident in the western half of the island, where many MBA material practices were retained (Leighton 2005: 280), perhaps an indication that any Italian peninsular migrants concentrated their relocations within the more proximate east.

As Sicily itself is not rich in metallic ores, foreign motivations for contact are related to either the representation the island as a strategic stopping point on the route further west or north, (i.e. to the ore bearing regions in Sardinia, Etruria, and Spain) (Blake 2008: 6), or as a supplier of other minerals such as sulphur, salt, and alum (Castellana 2000: 167; Blake 2008: 8). In its capacity as a convenient staging post, two sites in Sicily have been labelled as Aegean or Cypriot emporia – Thapsos and Cannatello – which acted not only as gateway communities supplying eastern Mediterranean materials to their adjacent interiors, but also ones that enticed other central Mediterranean maritime merchants (e.g. Malta, Sardinia, or Lipari) via the lure of available eastern goods (Tanasi 2008: 81-82; Blakolmer 2005: 658-59). At times, the local Sicilian voice is barely heard at all, as with Cannatello (see 3.4.1), where Aegean or Cypriot agents are described as controlling the flow of goods both along the coast, as well as to and from the interior (De Miro 1999a: 79).

Another common theme of culture contact in Sicily is that communication with Mycenaean Greece led to more socially complex and hierarchical islander communities

(Leighton 1999: 147; Tusa 1999a: 534). This is particularly evident with studies of the eastern harbour site of Thapsos, which is described as progressing toward a proto-urban state of social development (Voza 1985: 550). Some scholars interpret Aegean influence in every material feature of Thapsos-era communities (Bietti Sestieri 1988: 41-42; Tanasi 2009: 51). This includes: a more complex use of space, indicating centralised planning; MBA and LBA pottery shapes that appear to be derived from eastern, wheelmade pottery (see below); and rock-cut tombs that have more symmetrical plans, perhaps indicating a standardised unit of measure. There have also been attempts to equate Aegean contact with a developing social hierarchy (Alberti 2006), coupled with the idea that when such contact ended, there was a retreat to a more egalitarian society (Leighton 1996b). In only a few cases has the potential impact of Mycenaean cultural encounters been restricted (Blake 2008; Harding 1984), or has complexity and developing hierarchies been related to extrainsular contact in general, rather than a specifically eastern Mediterranean connection (Albanese Procelli 2003b: 104). The association of contact and complexity, and the material expressions connected with it, is explored in the first case study of Chapter Three, involving an examination of the harbour site of Thapsos (see 3.3).

While there has been much discussion concerning the presence and significance of locally made Aegean-looking pottery in both Sardinia and southern Italy (Jones 1993; Jones and Day 1987; Jones et al. 2005), the same cannot be said for Sicily. This is largely due to the dearth of petrographic and physico-chemical analyses of MBA and LBA pottery on the island. The analysis of a single coarseware stirrup jar from Cannatello (Day 1999: 66), and of 10 Aegean-looking sherds from Thapsos, Molinello, and Buscemi (Jones and Levi 2004), are notable exceptions, and have indicated that the pottery analysed are indeed imports. Based on visual inspection, there has been some inference of possible local manufacture of Cypriot pots at Thapsos and Siracusa (Alberti 2008b: 132), and a LH IIIC jug at Pantalica (Leighton 1996a: 115), although neither has been confirmed yet via physico-chemical analysis. To date, in fact, the only foreign-looking pots in Sicily that have had local production confirmed by provenience analysis are a single LH IIIB amphora from a tomb in Milena (Jones and Levi 2004: 171-72), and a number of Nuragiclooking sherds at Cannatello (S. Levi, pers. comm.). More common are discussions of the impact of foreign wares on indigenous (handmade) pottery production, with Mycenaean or Cypriot formal elements noted in Thapsos- and Pantalica-era pottery (D'Agata 2000; Tanasi 2005; Alberti 2008b).

As with the syntheses of the central Mediterranean as a region, there are significantly fewer studies of the material connections between Sicily and the western Mediterranean, or relationships between Sicily and its more proximate central Mediterranean neighbours. While this dearth of investigations into western connections could be explained geographically (i.e. in the sense that an island like Sardinia is better positioned within the central Mediterranean to exploit western networks), it is also, however, a by-product of the decidedly eastern focus of most scholars studying cultural encounters in Sicily. Often there is an assumption that a western connection simply did not exist during the MBA and LBA in Sicily, but needed to be re-instated in the Iron Age (Leighton 1999: 207; 1996b: 113). Part of the problem is no doubt the lack of attention paid to the western half of Sicily, particularly in comparison to the east. More recent investigations of western Sicily (Spatafora 2009; 2001) have started to redress this imbalance, and some tentative connections with the west proposed (Cultraro 2005). Central Mediterranean connections have been largely restricted to discussions of a Sikel migration from peninsular Italian (Bernabò Brea 1957: 147-48; Albanese Procelli 2003b: 23), although, at least in terms of bronze metallurgy, there have been some investigations in the past fifteen years that indicate a prolonged period of shared practices between Sicily and the mainland (Giardino 1996; Albanese Procelli 2003a, 1996). More recently, discussions of the connection between Sicily and Malta have started to appear (Tanasi 2008; Blakolmer 2005: 658-60), and an analysis of the Maltese pottery discovered at Cannatello will be published in the near future (S. Levi, pers. comm.). Cannatello and western Sicily represent the other key case study in Chapter Three (see 3.4).

To summarise, just as with the central Mediterranean syntheses, Sicily has seen challenges to the early notion of a settled Mycenaean presence, although this is still held to be a valid hypothesis for the east coast of the island (La Rosa 2004). Also in common with the central Mediterranean, any proposal of a more limited physical presence of Mycenaean agents has not qualified interpretations of the potential impact of contact with the Aegean upon Sicilian communities. Connections with the central and western Mediterranean are still in their infancy, and as such are still conjectured within a framework of Mycenaean exchange networks around the island.

1.3.3 Cultural Encounters in Sardinia

As with Sicily, there have been many interpretations of culture contact in Sardinia that posit a direct foreign presence during the LBA, although the potential impact of such encounters has been more cautiously approached (Webster 1996: 142). Despite some early

studies that posited Aegean influences in the development of the nuraghe (Guido 1963: 109; Lilliu 1967: 39), such ideas have been largely dismissed on both typological and chronological grounds (Blake 2001: 146; Gallin 1989: 22). More common is the characterisation of Sardinia's role as a supplier of copper ore in their interactions with extra-insular peoples during the MBA and LBA (Lo Schiavo 1985b; Cline 1994: 79). In few of these studies, however, is Sardinian mobility considered, and there is very little discussion of Sardinian motives for contact. Giardino's (1992: 304) description of Sardinia's important role in international exchanges is indicative of the passive role that typically characterises these islanders: "Sardinia was to play a leading part in this traffic, both as an indispensable navigational reference point, and as a supply source of metallic minerals." The idea that Sardinia was exporting surplus copper during the LBA is itself an assumption that has not been proven archaeologically (Webster 1996: 142), although Sardinia was certainly using copper and bronze for its own consumptive needs (Knapp 1990: 141).

Also in concordance with Sicilian investigations, the corporate identity of the foreign merchants or craftsmen involved is often assumed, with the same group producing, shipping, and exchanging exotica in Sardinia. Whereas Sicilian studies focus on the presence of Mycenaeans over other contacts, in Sardinia the role played by Cyprus in the island's development of copper and bronze metallurgy has come to dominate discussions (Lo Schiavo *et al.* 1985; Gale and Stos-Gale 1987; Knapp 1990; Karageorghis 1995). Only at Nuraghi Antigori has an Aegean presence been proposed, based on the conspicuous amount of Late Helladic pottery found there (Ferrarese Ceruti 1980, 1985). The community at Antigori also made Aegean-looking pottery locally (Jones and Day 1987), as well as a grey burnished ware (*ceramica grigio-ardesia*), which is usually considered to be an Italian mainland practice (Bettelli 2009). The pottery consumption patterns at Nuraghe Antigori represent one of the case studies in Chapter Four (see 4.3).

Copper oxhide ingots were first found on Sardinia in 1857, but were not identified as an 'Aegean' product until 1904 (Vianello 2005: 2). There has been significant debate concerning the significance of these ingots, which have been found at over thirty sites, almost always in fragments (Lo Schiavo 2005e). These ingots have also been found in other parts of the central Mediterranean, like Lipari, Sicily, Corsica, and southern France, although in significantly fewer amounts (Giardino 1992: 306, Fig. 2; Lo Schiavo 2005e: 308). The arguments largely stem from the provenience analysis of these artefacts, which have led some to insist upon their Cypriot origin (e.g. Stos-Gale and Gale 1992: 333) The

interpretive problem then becomes an issue of why an island with its own copper resources would need to import more, resulting in the common 'coals to Newcastle' analogy and various efforts to explain a seemingly irrational pattern of exchange (e.g. Knapp 1990: 144). This in turn has led to a questioning of the accuracy of lead isotope analysis as a provenience tool (Budd *et al.* 1995b; Knapp 2000; Pollard 2009). The consumption of oxhide ingots in Sardinia represents the other case study covered in Chapter Four (see 4.4).

While Cypriot control of Sardinian raw materials or of the metallurgical industry on the island is rarely proposed, it is typically Cypriots who are described as having initiated contact, and controlled the exchange agenda (cf. Stos-Gale and Gale 1992: 335; Webster 1996: 140-41). The most explicit reconstructions of the Cypriot – Sardinian relationship are provided by Fulvia Lo Schiavo (Lo Schiavo 1986; 2001; 2005b; Lo Schiavo *et al.* 1985). She has theorised about a direct Cypriot presence in the form of itinerant smiths in Sardinia, who provided both metals and technological know-how, although she admits the archaeological evidence for such presence is lacking (Lo Schiavo 2001: 139, 141). To get around this interpretive hurdle, Lo Schiavo (2001: 141-42) restricts these itinerant metallurgists to regular, but seasonal visits, in a kind of LBA cultural exchange, where Nuragic smiths also travel to Cyprus, and both parties are responsible for the presence of oxhide ingots on Sardinia. While it is refreshing to see Sardinian mobility considered, it must be acknowledged that the evidence for a Nuragic presence in the east is even less than for the Cypriots in the central Mediterranean.

Unlike in Sicily, there is not nearly as much insistence upon extra-insular contact with the eastern Mediterranean leading to social complexity in Sardinia, although there has been debate over whether emic or etic processes led to the elaboration of Nuragic complexes (Webster 1996: 108; Rowland 2001: 65). There is a greater willingness to explain the development of a distinctive Nuragic material culture as a by-product of Sardinia's insularity in the MBA (Webster 1996: 108; Patton 1996: 176). Discussions regarding the specific functioning and organisation of Nuragic sites more commonly involve competing theories of what historical scenario constitutes a valid analogy (see 4.1). In only one of these (Ugas 1992: 225) is contact with Mycenaean palace centres proposed as an important influence for Nuragic social development. There are certainly not enough foreign materials on Sardinia to posit sustained, formalised exchange with the eastern Mediterranean, and there is no apparent distributional relationship between where exotica are found, and the development of the most elaborate settlements (Webster 1996: 142). Thus, there is no straightforward association between foreign contacts and the development

of an elite class in LBA Sardinia. While almost all Aegean- and Cypriot-looking pottery on Sardinia has been found in nuraghi that were elaborated beyond a single tower (Webster 1996: 140), this may reflect a traditional excavation bias in favour of the larger, more complex sites.

There is more willingness to look west for material connections in LBA Sardinia than in Sicily, particularly with regards the spread of bronze forms (e.g. Lo Schiavo 2003: 25-28). Giardino (1995: 249-52) has also proposed a connection between Sardinia and the Iberian Peninsula involving the spread of burnished decoration on pottery. Within the central Mediterranean, despite the view that communication between Sardinia and Sicily was significant in the LBA (Giardino 1995: 292-93), archaeological evidence for this connection is still scarce and ambiguous. The above mentioned discovery of Nuragic sherds in Cannatello is a recent and important exception, particularly if the local manufacture of some of that pottery can be linked to a Sardinian presence on Sicily. Nuragic pottery has been found on Lipari (Ferrarese Ceruti 1998), although no corresponding Ausonian material has been identified in Sardinia. Even the proposal made in this study, of a material connection between Nuraghe Antigori and southern Italy (5.2.1), is based on a similar pattern of pottery consumption, rather than on actual LBA Sardinian material found on the mainland, or Italian objects at Antigori. Part of the problem may be the general ignorance of what Nuragic pottery looks like on behalf of central Mediterranean scholars not working on Sardinian assemblages, coupled with the rather generic appearance of many Sardinian pots. One exception to this lack of distinction is the Nuragic askoid jar, and it is probably telling that this conspicuous shape has been identified in Late Bronze or Early Iron Age (EIA) contexts in the central and western Mediterranean (Lo Schiavo 2005d; Fundoni 2009).

In sum, the representation of cultural encounters in Sardinia can be characterised as similar to those for Sicily and the central Mediterranean in the common assumption of a direct foreign presence, and a scholarly bias in favour of eastern Mediterranean contacts. The impact of these contacts on Sardinian society, however, is not as sweepingly or dramatically proposed, and no clear connection can be made between the presence of foreign objects, and the rise of social complexity in the island. Now that the broad interpretive movements in Sicilian and Sardinian cultural encounters have been outlined, the rest of this introduction is devoted to describing certain obstacles that exist in the study of culture contact in Sicily and Sardinia. A discussion of the research potentialities that this study explores concludes the chapter.

1.4 Problems and Prospects

Two key obstacles to any analysis of cultural encounters in Sicily and Sardinia during the Middle and Late Bronze Age are the problematic nature of the archaeological chronologies in the region, and the partial publication of relevant excavations. Charting social developments and material change in the central Mediterranean has been hampered by the imprecision of the region's chronological framework (Leighton 2000: 33-34), and most of the proposed absolute dates are based on the co-presence of Late Helladic pottery (Jung 2005: 473). Local sequences of Sardinian or Sicilian indigenous pottery are still fairly loose (Giardino 1995: 293). The publication of a comprehensive monograph on Nuragic pottery (Campus and Leonelli 2000), has provided a much needed typological categorisation of Sardinian pottery, but the relative sequences proposed are still very broad, and the authors (perhaps wisely) do not assign absolute dates. Absolute chronologies have even been referred to as "anathema" in Italy, with many recent LBA excavations published with only relative dates (Lo Schiavo 2001: 133). A more robust chronology for Thapsos facies pottery has appeared recently (Alberti 2004; 2007), and a proposal for the revision of the later Pantalica sequences (Leighton 2000) made many valid points regarding early 1st millennium BC synchronisms. Still, the absolute dating of Nuragic pottery (especially at the key site of Nuraghe Antigori), and the revision made to the Thapsos facies chronology continue to rely upon associations between local wares and Aegean pottery (Campus and Leonelli 2000: xv; Alberti 2004: 100-101). The absolute dates for Late Helladic pottery, however, were created to reflect stratigraphic contexts in the Aegean, and will never fit the central Mediterranean as well as Greece itself (Vianello 2005: 14).

There has been very little independent radiometric dating on Sicily, with only six radiocarbon dates for the MBA – EIA period (Leighton 1999: 272), hindering any independent verification for the validity of dates based on Late Helladic pottery. What few dates there are for the MBA, however, seem to agree with the traditional mid 15th – mid 13th centuries BC range (Leighton 1996c: 7, 9). The situation in Sardinia is slightly better, with several more radiocarbon determinations available, although they are often discounted by scholars more comfortable using Aegean pottery as a guide (Manning 1998: 297). While their concerns were more typological than chronological, it is nevertheless disappointing that the editors of the monograph on Nuragic pottery did not attempt to incorporate any radiocarbon determinations as at least broad dating guidelines, even though such determinations did exist for some of the assemblages they used in their classification (e.g. Nuraghe Noeddos, Nuraghe Santa Barbara – Kra 1998: 8; Campus and

Leonelli 2000: xiv-xv). As a result, the chronological framework followed in this investigation (table 1.1) is both broad and provisional. This should not hinder any discussions of the impact of culture contact upon islander societies, which is more concerned with appropriations, local contexts, and material adaptations than specific chronological problems, although it has led to debates over the occupational sequence at Thapsos (see 3.3.2). The looseness of absolute dates is a greater concern for those interested in re-constructing historically-specific movements of people, the definition of overly-specific trade routes, or the relationship of long-distance, directional trade with social upheavals in the eastern Mediterranean.

Timely publication of excavation data is a long-standing problem in Sicily (Leighton 1999: 8-9; Vianello 2005: 20), and when publications eventually do appear, they are often not widely available outside of Italy. The problem is particularly acute for two major sites discussed in this study, Thapsos and Cannatello, where only selective publication has occurred, although the excavations themselves were concluded over twenty-five years ago in the former case, and over ten in the latter. The key site in Sardinia for discussing eastern Mediterranean connections, Nuraghe Antigori, was only partially excavated, although the principal investigator was able to produce three preliminary reports of specific areas in the complex, and five more general treatments, before she died. For all three of these sites, publication has prioritised the presentation of extra-insular objects over local materials, making quantification analysis problematic. Another problem is that much of the data relied upon in studies of culture contact in these islands come from very early investigations. This applies to the bulk of evidence from eastern Sicily, where 19th century investigations of mostly tombs (e.g. Orsi 1895) still form the material foundation for much of what has been interpreted. It also applies to several finds of oxhide ingots in Sardinia: even when the artefacts themselves still exist, the archaeological contexts (if ever known) are now forgotten (Lo Schiavo 2005e: 317-26).

Selective focus is a common problem in the presentation of appropriate evidence for these islands. There is too much reliance on funerary data in creating models of social development and external contact in Sicily, and too little attention paid to the west of the island. The settlement of Thapsos has been forced into the role of type-site for the MBA (D'Agata 2000: 62; Leighton 1996b: 102), despite its singularity. As van Wijngaarden (2002: 206) has pointed out, however, Thapsos should not be considered a type-site "for any region or period." Constantly referring to it as such posits "the unique as the typical" (Harding 1991). The same could be said about the use of Nuraghe Antigori as a type-site

	Sardinia (Ugas)	Sardinia (Webster)	Sicily	Aeolian Isles	S. Italy	Aegean
1500 BC 1450	MBA B Nuragic IA2 (Monti Mannu)			MBA Capo Graziano 2		пнп
1400		MBA Nuragic II	MBA Thapsos I		MBA Apennine	
1350	MBA II-Nuragic IB (S. Cosimo)	(Боппапаго Б)	MBA Thapsos II	MBA		
1300	LBAI - Nuragic II A (Muru Mannu)		MBA Thapsos III	DCD77EHAT	LBA	LH IIIB:1-2
1250	LBA II Nuragic II B		LBA Pantalica I	LBA Ausonian I	Sub-Apennine)	
2071	(Anugori)		(North)			LH IIIB2/C
1150		LBA Nuragic III			LBA	ТНШС
1100	FBA I Nuragic IIIA		LBA Pantalica II	LBA	Bronzo Finale (Sub-Apennine)	
1050	(Oristano)		(North)	Ausonian II		Submycenaean
1000	FBAII		LBA Pantalica III			(Protogeometric)
006	(Barumini)	IA – Nuragic IV	(Cassiblie)	Iron Age	Iron Age	

Table 1.1: Chronological scheme followed in the thesis.

for eastern Mediterranean contacts on Sardinia, and its designation as an international emporium (Ferrarese Ceruti *et al.* 1987: 37), when its assemblage of approximately 200 Aegean- and Cypriot-looking sherds represents the only significant amount of imported pottery for the island during the LBA.

Assumptions regarding shifts in settlement patterns tend to be based on traditional site distributions, where often the only prehistoric sites known are chance finds, stumbled upon while archaeologists were looking for other occupational periods. Only recently has survey data begun to enhance our knowledge of settlement distributions. Coverage of Sicily is inconsistent, however, lacking decent exploration along the north coast, and more troublingly, in the southeast, where many Middle and Late Bronze Age tombs are known, and where contact with the east is typically described as intensive (Leighton 2005: 264). Despite these drawbacks, there is preliminary evidence that the traditional distribution patterns of settlements is inaccurate, with not nearly the downturn in number of sites in the MBA as once believed, and with the recognition of more and more coastal sites dating to the LBA – EIA (Leighton 2005: 278), confounding frameworks that stress the abandonment of coastal sites for defensive reasons (Bernabò Brea 1957: 149; Holloway 1985: 391). It is possible, however, that Thapsos did experience a break in occupation for part of the LBA (see 3.3.2).

Another common trend is the conflation of Cyprus and the Aegean as a single cultural entity, assuming both islands had identical motivations for contact, and parallel cultural trajectories (e.g. D'Agata 2000: 77; Vianello 2005: 7). In some instances Cyprus is even referred to as being 'Aegean' (Smith 1987: 18; Vianello 2005: 18). In this study, such assumptions of common goals or of 'Mycenaeanised' Cypriots are avoided. As the involvement of Cypriots and Aegeans in the central Mediterranean can be distinguished both by the time period of principal contact, as well as by specific regions of interest (Bietti Sestieri 2005), there is no need to combine these regions into a singular phenomenon of international exchange or prospection. One way they are treated in common, however, is that there is no assumption of their physical presence in Sicily and Sardinia, with a distinction made between mobile foreign agents and mobile imported materials (see 2.1.1).

Despite the limitations imposed by the data available, enough is now known about MBA and LBA extra-insular encounters in Sicily and Sardinia not only to evaluate current ideas about culture contact, but also to propose new interpretations, and inevitably to provide a more general and inclusive synthesis. A discussion of consumption choices made

by islander societies provides a better picture of who the agents involved in specific material connections were, and instigates discussion of the identity implications for local

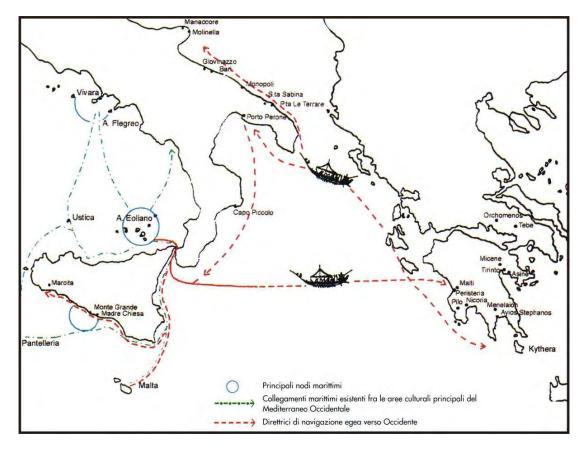


Figure 1.2: Typical representation of MBA - LBA maritime mobility. The ship depicted is derived from a fresco on LBA Thera. (Tusa 2001: 258, fig. 1.)

communities (e.g. moving beyond the homogenising assumption of 'Mycenaeanised' Sicilians). Previous studies concentrating on tracing the routes of exchange are typically displayed as unidirectional lines on a map going from east to west (figure 1.2). These studies subsequently propose a transformation of islander societies because of contact, but very rarely explain just how such a process actually works. Why does contact lead to more complex, urban settlements, and more entrenched social hierarchies? What benefit was there for a foreign trader or mobile artisan (from anywhere) to come to a site like Thapsos and 'educate' local peoples with whom they had a commercial relationship? Why would local communities want to imitate the architectural features of their trade partners, including culturally sensitive ones (i.e. tombs), and why would eastern maritime merchants encourage such a practice? Would it have been obvious or even apparent to locals that foreigners coming on ships hailed from a more complex society? What power relationship is actually envisioned in these exchanges?

The lack of study of the effects of foreign contact upon social identities (e.g. class, gender, age, occupation) is disappointing, as this is a more viable area of research than its impact on broader corporate identities. Given that there was no island-wide centralised political authority for either island, it would be difficult to posit sweeping changes in social structures or group identity. This lack of unification, however, also confounds any framework that stresses insularity or isolation as a key factor in cultural development, especially if such insularity is defined as an "agreed social strategy" designed to produce a "distinctive island identity" (Knapp 2008: 19). Sardinia, although possessing a fairly distinct material culture, did not have a closed cultural system, and the evidence for contact, thin as it is, is still widespread enough to indicate that contact was both possible and desired. In Sicily, insularity is never cited as a critical feature of MBA or LBA islander identity (Leighton 1999: 2), although it has been observed that in many instances contact leads to a greater emphasis of corporate distinctiveness (Barth 1969: 9-10). A closer look at how extra-insular influences were adopted and, more significantly, rejected, at Thapsos demonstrates that emphasising a Sicilian identity did have cultural currency for a community open to the wider Mediterranean world.

Focusing on the consumption of exotica by native populations is an important step in assessing the impact that foreign contacts had in any given area. For example, from a consumption perspective, the debate concerning the provenience of copper oxhide ingots becomes a less pertinent issue: either the ingots are imports themselves, and indicate contact with Cyprus (or some other intermediaries), or they reflect the desire of Sardinians themselves to participate in extra-insular exchange networks, with their appropriation of the oxhide shape betraying a knowledge of eastern practices. In both scenarios (i.e. import or imitation) contact, either direct or indirect, is stipulated, and the impact of such practices on Sardinian society is a valid area of study. Of course, such an indication of the exotic, either as imported good or imported practice, should be the beginning of an investigation of material connections, not the conclusion (Knapp 2000: 46-47).

An important step in moving beyond the eastward focus for cultural encounters in the central Mediterranean is recognising the full spectrum of contacts for this time period. There is a small but growing corpus of evidence for networks of interaction between Sardinia, Sicily, the Italian mainland, the Aeolian islands, Malta, and the Iberian peninsula, which includes both materials from those other regions now recognised in island assemblages, as well as Sardinian and Sicilian materials found in an ever-increasing scatter over the wider Mediterranean world (e.g. Lo Schiavo 2005d; Fundoni 2009; Watrous *et al.*

1998). While some have considered these connections to be predicated on Mycenaean seafaring (Giardino 1995: 292) or later Phoenician networks (e.g. Bernabò Brea 1957: 156), more and more there is evidence that such contacts predate eastern Mediterranean involvement in the region. An assessment of the potential mobility of Sicilian and Sardinian agents also deserves more consideration. Finally, recognising material connections other than those from the eastern Mediterranean helps to offset the preponderance of models that involve (or heavily imply) stationary, passive islanders receiving the gifts of advanced civilisations, with only raw materials, or a convenient geographic reference point, to offer in return (Giardino 1992: 304).

The core of the dissertation involves a critical re-examination of the material data in light of the theoretical positions outlined in Chapter Two. The archaeological evidence is broken down by island, first examining Sicily (Chapter Three), and then Sardinia (Chapter Four). This division is appropriate since the level and nature of contact on Sicily and Sardinia differ in terms of the temporal scope of interaction, who was involved and what their objectives were, and whether direct co-presence represents a plausible scenario. Following the presentation of data, the discussion chapter (Five) involves: an analysis of the actual quantities of imported material involved; a closer look at consumptive choices made by discrete islander communities and their implications; an evaluation of the likely agents of mobility; and a new interpretation of the differing levels of cultural mixings, told from a hybridisation perspective. The dissertation concludes with a brief discussion of the types of discourse that allow for the maintenance of the Aegeanocentric model of cultural contact, a more inclusive proposal for the types of encounters envisioned during this period, and an outline of where future research should be directed.

2 Theoretical and Methodological Considerations

This chapter outlines the theoretical perspectives adopted in this thesis. These perspectives address the following issues: the location of material innovation, and the intensity of contact required to produce change; appropriate ways to describe any material changes that result from cultural encounters; how the use and manipulation of material culture relates to issues of identity; the relationship between the final deposition of extra-insular objects and identifying the agents of mobility; and strategies of connectivity and insularity, as employed or promoted by islander elites. The chapter concludes with a discussion of the methodology followed in the light of the positions taken, including the creation of a database of foreign connections, and the use of comparative consumption patterns to illuminate just who is connecting with whom.

2.1 Cultural Encounters

The meetings of differing culture groups, and the effects that such encounters have on the parties involved is an issue of immense current interest in Mediterranean archaeology (e.g. Harding 1984; Stein 1998; Dietler 1998; van Dommelen and Knapp 2010). The following discussion assesses emic versus etic processes of change, outlines the traditional models and their shortcomings, proposes a more nuanced approach influenced by postcolonial studies, and considers the potential for islander mobility in the spread of extra-insular materials.

2.1.1 Contact and Material Innovation

[B]ecause it is so common and relatively easy to identify in the archaeological record, archaeologists...have overemphasized the importance of interregional interaction as a primary cause of social evolutionary change (Stein 2002: 903).

The location of innovation is one of the enduring debates of culture contact (e.g. Stein 2002; Bietti Sestieri 1988; Doonan 2001; van Dommelen 2006b), and as this study is actively concerned with assessing the impact of foreign materials, influences, and practices on islander societies, the question of how to distinguish local cultural developments from those inspired by contact is crucial. The traditional models tend to see indigenous communities as fairly static entities when contact is low, and islander originality somewhat limited (Tusa 1999a: 508). From a consumption point of view, however, material changes, whether inspired by external contacts or not, still involve the impetus and inspiration of local agents in their active appropriations and rejections, even in instances of more

straightforward 'copying' of foreign objects. This local decision making and input is rarely acknowledged.

The first place to begin an assessment of the location of innovation should be to determine if any contact is evident (i.e. in the presence of foreign materials). For people living on a large island like Sicily or Sardinia, particularly those located at some distance from the coast, the potential for contact, and the presence of foreign materials themselves, may be severely restricted. In such a situation it is logical to assume that any material innovations are local developments. It is the coastal sites of Thapsos, Cannatello, and Plemmyrion on Sicily, and Antigori on Sardinia, which have (predictably) produced the largest assemblages of foreign objects to date. As this study is only looking at sites that have evidence of foreign materials or foreign influences, any places that lack such data are necessarily excluded from analysis. A consumption-based approach only works if there are materials to consume.

The question remains, therefore, of how much exotica is required to encourage material or social practice innovations. It has been noted that the amount of data is not necessarily a reliable indicator of the possibility of foreign-inspired changes (Alexander 1998: 487). This works both ways: a small amount of foreign material does not preclude the potential for externally-inspired changes; while a (relatively) large amount of data is no guarantee that any changes resulted from contact. Moreover, information streams may leave little indication in the material record. Thus technological innovations may be possible in the absence of exotic items that represent such innovations. Still, a small amount of data would seem to restrict the kinds of interaction possible, and consequently to limit the potential for foreign influence. It has been remarked that there is no real evidence for eastern Mediterranean settlement in Sicily or Sardinia before the 1st millennium BC, which would have limited exposure to foreign materials, practices, and technological information.

Given the circumscribed evidence for contact, frameworks involving colonisation are not possible for the central Mediterranean (Blake 2008: 1; Vagnetti 1999: 141), although other lesser settlements have at times been postulated (e.g. the 'community colonies' mentioned in Chapter One – Smith 1987: 157-58). There has also been some speculation regarding the presence of itinerant artisans, particularly potters, smiths, and architects, at work in the central Mediterranean (Jones *et al.* 2005: 543; Lo Schiavo *et al.* 1985: 63; Militello 2004a: 326-27). Such interpretive models work best when the introduction of foreign materials is coupled with the introduction of new techniques, especially if such

technological innovation would be difficult to acquire without direct tuition. In the case of the central Mediterranean, the introduction of fast-wheel pottery to southern Italy, rectilinear and *tholos* architecture to Sicily, and certain bronze casting techniques to Sardinia have all at times been credited to the presence of foreign artisans.

It is difficult to gauge just how much of the itinerant artisans model has grown out of traditional, diffusionist ex Oriente lux frameworks, where advanced eastern Mediterraneans civilise technologically backward central Mediterranean societies. It is curious how rarely any technological innovations are credited to artisans from other areas, such as the western Mediterranean, or from further north in continental Europe (but see Giardino 1995 for a discussion of western Mediterranean influences in metallurgy). Equally rare are any proposals of central Mediterranean influence on the arts and crafts of the east. Whether there is any validity to the itinerant artisans model, what is almost always lacking is motivation for such mobile agents: what did the central Mediterranean provide them that they were unable to get back home? Moreover, just how free to roam would skilled artisans have been (Muhly 2005: 690)? Another problem is the subjective nature of the evidence: while certain technological aspects can be adequately proven through archaeometric analysis (such as determining if a fast wheel has been used in pottery production), other technological traits are simply assumed. For example, in what way does one determine that a rectangular building represents Aegean architectural know-how (Militello 2004a: 314; Tomasello 2004: 213)? There is a tendency in central Mediterranean scholarship to use the terms of Aegean prehistory (e.g. tholos, megaron, Anaktoron) or even later Greek history (symposium, hecatomb), to give indigenous evidence the veneer of eastern origins.

In some instances, the context of exotica consumption can be a limiting factor in its ability to bring about changes in social practice. For example, in Sicily almost all of the Aegean pottery is found in funerary contexts, while in southern Italy the majority are found in domestic contexts (Harding 1984: 245, 247). Did this contextual discrepancy have differing effects in the two regions? It could be argued that the more day-to-day visibility of such wares in Italy was a contributing factor to the local (i.e. south Italian) production of both imitations, and a hybrid grey ware (*ceramica grigia*) using a fast wheel, while in Sicily the relative invisibility of such wares (in tombs) meant such pottery was not imitated, and any formal features borrowed by new local forms were still produced by traditional techniques. Diffusionist explanations for this discrepancy would emphasise the

presence or absence of foreign artisans; however, from a consumption point of view, the context of this pottery also plays a role.

Even if we can accept that certain materials, and perhaps certain individuals, could have influenced local production, how much did such material innovation affect the makeup or development of islander societies? Certain materials like Aegean pottery may be exotic items in Sicily and Sardinia in terms of their frequency, but it is by no means obvious that they would have been considered luxury items, capable of bestowing status on their owners or users (Manning and Hulin 2005: 282). Blake (2008: 2), in her minimalist perspective on Mycenaean materials in Italy, posits only small-scale and sporadic contacts between the Aegean and the central Mediterranean, which had only "a circumscribed impact, in limited areas." Based on the amount of data, and the long period of time in which it accumulated in the central Mediterranean, such a minimalist perspective seems justified. Even in southern Italy, where a much larger corpus of evidence exists than in Sicily or Sardinia, there is a reluctance to credit too much social impact on the presence of Aegean materials, or the possible presence of itinerant artisans (Bietti Sestieri 1988: 49). Still, this study recognises the ability of materials to have a generative affect on the social groups who use them (Blake 1999: 37), and the case studies that follow in Chapters Three and Four take a closer look at the relationship between the consumption of materials and the identities of the consumers.

Finally, it should be emphasised that any contact and interaction leading to material or social innovation did not have to be with foreigners coming from a long distance.

Broodbank (2000: 176-80), in discussing social development and the rise of complexity in the EBA Cyclades, highlights the role of local networks of interaction, and the relationship between such networks and the development of group identity expression. Local interaction and social competition could be responsible for certain social developments in the central Mediterranean as well. For example, common architectural features seen between Sicily, the Aeolian Islands, and Ustica (Leighton 1999: 157; Doonan 2001: 181) could be one material indicator of the existence of central Mediterranean nodes in contact and competition with one another, producing a common architectural response. While there is an acknowledgement of the presence of material influences between certain areas during the late prehistory of Sicily and Sardinia, these are often secondary streams of information, relegated behind contacts with the east, and at times even dependent on eastern actors (Rowland 2001: 58). There has even been the suggestion that when eastern goods entered the central Mediterranean, there was a cessation of contacts between local

communities there, only to resume following a drop-off in eastern goods in the Iron Age (Leighton 1996b: 113; 1999: 207). I would argue, however, that there is a downturn in interest in local, central Mediterranean networks among present day scholars, who prefer to discuss the more obvious foreign material incursions of better known eastern Mediterranean societies. When material connections among central Mediterranean groups are acknowledged at all, they are often forced into migration and invasion frameworks, based on much later written accounts (Bernabò Brea 1957: 137; Leighton 1999: 215-16).

Now that some of the interpretive challenges involved in assessing the location material innovations have been outlined, I turn to a discussion of how interpreting material changes can be plausibly related to cultural encounters. Here, the frameworks of acculturation and hybridisation are described and contrasted.

2.1.2 Acculturation vs Hybridisation

...hybridity does not involve a single process, though it can sometimes be discussed in unimaginative abstract terms far from any consideration of the dynamic dimensions of cultural formation and contestation...It involves processes of interaction that create new social spaces to which new meanings are given. These relations enable the articulation of experiences of change in societies...and they facilitate consequent demands for social transformation (Young 2003: 78-79).

It may seem unusual for a thesis studying the material remains of pre-colonial Sicily and Sardinia to look to post-colonial theory for frameworks with which to analyse the material evidence for cultural encounters between 1450 – 900 BC. As post-colonial scholars have pointed out, however, this perspective is not just about re-analysing the archaeology of colonisation, but also re-assessing the scholarship that is a by-product of the 'colonisation of archaeology' (Dietler 2005). Western colonialist perspectives still dominate the study of cultural encounters in the central Mediterranean, as the preponderance of studies that place Aegeans and Cypriots front and centre in any analysis of Sardinian or Sicilian archaeology in the MBA and LBA clearly demonstrates. Those who would propose an analysis of the data from a local, indigenous perspective are accused of giving in to "fashionable angst" over the colonial exploitations of the past five centuries (Boardman 2001: 33). It is only logical, however, when discussing the development of islander societies, to begin with the local perspective before engaging with foreign materials, as it always would have been the dominant 'voice' in MBA – LBA Sicily and Sardinia (Knapp 2008: 1). This means moving past the "intentionality of the producer" in scenarios where material goods cross cultural boundaries, and instead recognising the "creativity of the consumer" (Howes 1996: 5).

Culture contact studies often refer to a process of acculturation to indicate any material shifts that occur as a result of cross-cultural encounters. This term receives broad usage by scholars working in the central Mediterranean to describe the impact of extrainsular contact on indigenous assemblages (e.g. Tanasi 2009: 51; Hodos 2006: 15; Lyons 1996: 177). The problems with the term acculturation have been neatly summarised by Cusick (1998a) in his historiography of the concept. The key problem is a lack of consensus on just what acculturation means. Cusick outlines four main definitions in acculturation literature, not all of them compatible: the loss of traditional materials and practices by (almost always) the subaltern, indigenous population; the adoption (whether forced or voluntary) of 'western' materials and practices; a value-neutral description of any changes that occur as a result of culture contact; and a (presumably voluntary) acceptance of outside influences, while still maintaining the same basic value system and lifestyle by the indigenous party (Cusick 1998a: 128).

It is apparent, then, that while acculturation could be used in a more balanced, valueneutral way, in practice it tends to put the credit for inspiration and innovation with foreign
parties and foreign goods. The local communities in which such goods or influences are
found become little more than passive receptors, replacing their own inferior materials for
more advanced goods as the inevitable result of contact (Dietler 2005: 56). If truly value
neutral, acculturation should credit the cultural contributions of either party as relevant,
and thus be seen as a dynamic process, where influences have the potential to flow both
ways. In most cases, however, it is described as a fairly unidirectional process and "is used
as a model to highlight the processes by which the pre-existing cultures adopted and
adapted the material and social cultures of the foreign settlers" (Hodos 2006: 15).

Cusick (1998a: 135) also points out that much of the theoretical landscape for acculturation was created within a framework of "enforced policies for social change," where cultural anthropologists were given a specific agenda by governmental administrators. Instead of objective questions such as 'what happens in this specific culture-contact situation,' anthropologists pursued more directed research, designed to answer questions like, 'how can we get this group to accept a more western lifestyle?' While archaeology, particularly prehistoric archaeology, may seem immune to such concerns because it investigates past societies, the problem arises when archaeologists employ these acculturative frameworks without being aware of how they were formed (e.g. in 'social laboratories' such as 20th century AD Japanese internment camps). Thus, the "unreflective citation" of dubious cultural anthropological research (Cusick 1998a: 135)

provides the doorway through which such biased scholarship dictates a material analysis of the past. As a result, a vague concept of acculturation, usually in its Classical and Near Eastern archaeology guise of Romanisation, Hellenisation, Orientalisation, Mycenaeanisation (Tanasi 2009: 51), or even Levantization (Stone 1995), is employed frequently and uncritically by scholars working in the central Mediterranean. Since these concepts sound like neutral processes, it becomes easy to overlook the clear sympathy felt for the presumed superior foreign parties, and the impression that any influence exerted by them (even in instances of violence) was inevitably beneficial to the backward native (Boardman 1980: 198). Acculturation, therefore, actively encourages a unidirectional interpretation of culture change.

Not only do acculturation frameworks lead to assumptions such as the active part played by the foreign party, and the passive, receptive role by the indigenous host, they also allow for a simplistic dualist paradigm of the culture contact situation, where there is only the 'local' and 'foreigner' (Stein 2005: 25-26). In colonial situations this becomes simply the colonised and coloniser (van Dommelen 1998: 20-22). For this pre-colonial period, it reduces the situation to a culturally homogenous foreign merchant and a homogenous host. Such reified concepts of culture tend to describe material trait lists coming into contact like "billiard balls" (Cusick 1998a: 131), and subsequently changing the direction of both. This neatly avoids any discussion of agency, particularly on the part of the host population (usually the stationary 'ball'), and creates a scenario that infers the inevitable process of a higher, advanced civilisation educating and changing an inferior, barbaric host. As Stein (2002: 906) points out, however, interregional encounters were never "bipolar confrontations," but rather involved "multiple groups" with pluralistic social identities, many of which could shape the cultural encounter. For example, not only did MBA and LBA maritime exchanges involve people with differing corporate statuses interacting (e.g. Aegeans with Sicilians), but also often differing class memberships (e.g. merchant-class traders with elite-class local agents) or more broadly, mobile merchants with "a whole society" (Curtin 1984: 5, emphasis original) made up of multiple social identities, and differing agendas.

This simplified view of mobile and stationary cultures leads to the final problem with acculturation: its essentialist equation of material culture with ethnic identity. In the central Mediterranean at the end of the 2nd millennium, for example, there is an assumption that all Sardinians recognised and acknowledged a shared identity, as indicated by the widespread Nuragic material culture. This can lead, however, to the supposition of a

common, shared response to cultural encounters, regardless of class, faction, gender, or location (e.g. living on the coast vs. living inland; living in a simple nuraghe vs. living in a multi-towered one). While labels such as Sicilian, Sardinian, Aegean, and Cypriot are used throughout the present study to refer to certain materials or traits, it should be stressed that such broad corporate distinctions are not intended to convey ethnic identities, static situations, or presumptions of socio-political unity. Instead, they are used as broad geographic markers to indicate regions of possible connectivity, often only in an indirect manner. For this reason, the traditional ethnonyms of Sicily – Sikel, Sikan, Elymian, Ausonian, and Morgetes – are not employed, as there is no reliable way to associate differing regional assemblages with these names (Albanese Procelli 2003b: 18). As such terms are provided by later authors who are not themselves members of these groups, it is not clear if they reflect self-ascriptions (arguably the most important feature of an ethnic label – Emberling 1997: 302), or merely corporate identities of convenience provided by external groups. The term Nuragic is employed, however, to describe broadly the native material culture of Sardinia, as this term is widely acknowledged as a modern label of convenience, and is not related to a particular ethnic group, although widespread material similarities and practices in Middle and Late Bronze Age Sardinia might indicate that a Nuragic identity was being (at least retroactively) created (Blake 1999: 46-47).

To address the problems with the concept of acculturation, this study proposes a hybridisation framework. Knapp (2008: 57) recognises two contact situations where hybridisation has been used to analyse material culture: colonial situations (of any time period), and studies involving the modern globalisation of commodities. In the former situation, hybridisation is defined as "the social interactions and negotiations that take place between colonists and the colonized" (Knapp 2008: 57), and as such involves more than just material hybridity, but the mixings of ideologies, practices, and even populations. Such mixings are an inherent feature of co-presence, and the objects that are produced by these combinations are typically obvious features of the material record (van Dommelen 2006a: 118). These hybrid products are often called creolised objects, a term borrowed from linguistics (Stein 2005: 28). For the present – strictly material – study, hybridisation is the preferred term, as it has found wider currency in recent texts (van Dommelen 2005; Tronchetti and van Dommelen 2005; Papasteragiadis 2005; Knapp 2008: 57-58; Russell 2009).

From the period of prolonged co-habitation that is suggested by the establishment of colonies, a third space is created, born out of resistance to wholesale colonial assimilation

and the ambivalence created by hybridity (van Dommelen 2006b: 137, following Bhabba 1994), or what Young (2003: 79) in the introductory quotation refers to as the "new social spaces to which new meanings are given." Hybridisation, therefore, has the advantage over acculturation in that it actually recognises the ability of the colonised to contribute to the creation of new social forms, even in contact situations where the power relationship often favours the colonists. Scholars dealing with cultural encounters have correctly pointed out that while interactions themselves are often structured (e.g. in trade relations, colonisations, or periods of migration) because of the impact of human agency, the actual outcomes of such structured contacts are not predetermined (Cusick 1998b: 6; Alexander 1998: 477). The mixings and reconfigurations described in a hybridisation approach are not described as either the imposition of a superior culture on an inferior one, or the passive acceptance of outside forms by local peoples as the inevitable result of contact with more 'complex' societies (Alexander 1998: 486). As the recipient societies are given an active agency in their conscious acceptance or rejection of foreign influence, there is no need to assume any natural predisposition to adopting new materials or ideas (Stein 2002: 905).

While the present study does not involve colonial episodes, many of the same cultural mixings could have occurred, even in an environment where the foreign and indigenous parties interacted less frequently, and on a more level footing (Militello 2005: 594). The connectivity seen in the central Mediterranean in the last half of the 2nd millennium may have laid the foundation for 1st millennium colonial movements of the Phoenicians and Greeks, but there is no evidence of even significant migration to either Sicily or Sardinia from the eastern Mediterranean before the 8th century BC. For that reason, the material hybridity interpreted in the case studies provided is more a reflection of Knapp's second contact situation: the globalisation of certain material forms (and perhaps practices associated with such objects), and their effects on islander communities. In such an environment, where the power relationship is either equal or favours the local hosts, the decision of what to accept or reject, and how to incorporate such materials or influences, is solidly in the hands of the 'receivers.'

A second advantage that a hybridisation framework has over acculturation is the recognition that foreign objects, or the hybrid objects that result from them, when incorporated into a new social setting, will not necessarily have the same cultural connotations for the consumers as they did for either the producers, or the agents of mobility (Dietler 1998: 299). Such objects may in fact represent a negotiation within the

indigenous society: a qualified acceptance of certain material changes when they have been naturalised in such a way as to be digestible within a potentially conservative context. In this light, such material influences are not so much passive acceptances, but active appropriations, and hybridity is not merely the output of contact, but a dynamic process of hybridisation "through which new identities are negotiated" (Stein 2005: 28; van Dommelen 2005: 116-18). Even in instances where it appears that new materials are being used in a very similar way to the donor group (i.e. cases of emulation), it is a mistake to see such repeated practices as necessarily instances of foreign domination in the political or economic spheres (Stein 2002: 907).

One example of a globalised object accepted and adapted into a new social setting will help to illustrate this process of recontextualisation in action. In Macdougall's (2003) study of the introduction of American Barbie dolls to the Yucatan peninsula, she notes how these objects are more-or-less empty vessels, stripped of the independent, career woman associations intended for Canadian or American consumers. Often they are sold without clothing, the main feature that gives such dolls their identity (Macdougall 2003: 273). After purchase, they are dressed in traditional Yucatan garb, reflecting the important identities and practices of young Mexican girls, such as participation in the quince anos festival, a local rite of passage for fifteen-year-olds on their birthday (Macdougall 2003: 268-69). In such a context, Barbie dolls represent not only a new aesthetic, one that is more palatable to the Yucatan community, but also an adapted local practice, the quince anos, where the doll is displayed on top of the birthday cake, often matching the outfit of the birthday girl herself. Not only is the local practice somewhat altered by the presence of the foreign object, the object itself has been altered to reflect a more appropriate local identity - naked Barbie stripped of her career woman associations, and clothed as a more familyoriented Mexican woman.

The use of a hybridisation interpretation to explain the reconfigurations and consumptive choices of host societies in instances of globalisation are, as Knapp (2008: 57) pointed out, largely used to describe occurences in the modern world, such as the use of Barbie dolls in Mexico. The concepts engendered in such an approach, however, are just as valid in describing globalised material forms in the Bronze Age, such as the spread of Late Helladic painted pottery, copper oxhide ingots, or Atlantic bronzes, and their reception into islander societies in the central Mediterranean. In fact, in this era of premass communications and mass transit, such 'globalised' materials would often arrive in specific contexts having passed through several hands; therefore, the re-contextualisation

of these objects must surely have been the norm and not the exception (van Wijngaarden 2002: 28). This study recognises, however, that in a prehistoric context the term globalisation may be somewhat misleading, and for this reason the process describing instances of the spread of popular materials is called an object diaspora (Knapp and van Dommelen 2010: 7). This has the benefit of not insisting upon a misplaced global perspective, as well as actively promoting the separation of objects from their presumed or symbolic place of origin.

A third advantage of hybridisation over acculturation involves the more judicious use of a diachronic perspective. Acculturation-based analyses often describe a set of static motives for foreign parties, and static receptions on behalf of the indigenous societies, even when the connections play out over a prolonged period of time. The study of archaeological data should be tailor-made for analysing longer term changes in connectivity, yet contact situations are still often described as the spread of foreign interests into virgin territory, such as the Mycenaean 'penetration' of Sicily (Tanasi 2009), or a persistent Mycenaean or Cypriot interest in acquiring Sardinian copper (Ferrarese Ceruti and Assorgia 1982: 170-71). There is little concern paid to any local motivations in promoting or maintaining contacts, or to the existence of indigenous exchange networks (Dietler 1998: 294). This not only ignores local groups, who are often assumed to have been unchanged for centuries (van Dommelen 2006b: 138), but also homogenises the foreign party, whose motivations for contact remain static during the entire period of the cultural encounter. Such acculturative approaches become "teleologically reductionist" (Dietler 1998: 288) in their assumption that the final results of contact were the original motivations as well, or that any imbalanced power relationships existed from the outset of contact.

As hybridisation deals with context-specific mixings, and is inherently interested in the responses to contact by both parties, it is an ideal perspective for assessing changing contact situations over time (e.g. different foreign 'actors' involved, changing local tastes), as well as comparing different regional patterns of contact synchronously. Just as there should be no assumption of static motives for contact over time, there should be no assumption of static responses to contact, especially in a region as diverse as the central Mediterranean. Local communities are very much "in motion" at the moment of contact (Dietler 1998: 289), and prolonged encounters that stretch across several decades may find local situations significantly altered during different moments of connectivity. It is only

when approaching contact from the foreign, outsider point of view that the illusion of static local societies is maintained.

2.1.3 Consumption as a Tool of Social Identity Formation

If, as we would argue, the proper focus of trade is consumption, then it is necessary to form an idea of the role of imports in indigenous systems, a role dependent on the degree of familiarity of a product, and social constructs of alien/exotic (Manning and Hulin 2005: 280).

As anthropologists have often pointed out (Barth 1969; Douglas and Isherwood 1978: 5; Howes 1996: 1-2; Curtin 1984: 59-60) our use of material culture conveys information to those we interact with about who we are. In other words, the consumption choices we make affect our identities, both how we display ourselves, and how others react to us. The goods we use, eat, or wear represent a set of meanings; a 'code' of information read by those with whom we come in contact (Douglas and Isherwood 1978: 5). These sets of meanings, however, are culturally-specific, and may or may not transfer to other cultures when the goods themselves are distributed outside of their original arena of associations. As Howes (1996: 2) explains, "when goods cross borders, then the culture they 'substantiate' is no longer the culture in which they circulate." In instances of crosscultural consumption, therefore, the meanings assigned to these goods must be understood from the perspective of the consuming society. For anthropologists studying the effects of the globalisation of materials around the world, this involves asking questions and observing the behaviour of living societies, such as Macdougall's investigation of the consumption of Barbie dolls in Mexico. In this study, where the material remains of extinct societies are under investigation, the means of assessing the reconstruction of meanings in cross-cultural exchanges are obviously less straightforward. It is necessary to rely on clues provided by context, as well as what is known about the structure and ideology of the consuming societies prior to the adoption of new materials, in order to interpret "the logic by which goods are received (acquired, understood and employed) in different societies" (Howes 1996: 2, emphasis original).

As stated above, one advantage of looking at cultural encounters from a local perspective is the ability to analyse contact situations from a consumption-based point of view, assessing the way foreign materials are integrated with local ideologies and traditions, and how such integrations can lead to hybrid materials and practices. What still needs to be emphasised is the role of consumption, and the choices entailed within it, that can lead to the development of new social identities. In other words, it is necessary to go

beyond hybridisation as a descriptive tool of the material outputs in cultural encounters, and recognise the deeper implications that such combinations have on the make-up of societies.

Consumption is often regarded as "the ending point of material culture" (Miller 2006: 342; Curtin 1984: 21-22), perhaps because of its association with ingesting substances. Even in culture contact situations, the reception of foreign materials by local communities is often described as if it were the end of the process of connectivity. This may have some validity for scholars only interested in examining exchange networks and the spread of some particular object. From a consumption point-of-view, however, the reception of foreign materials, technologies, and ideas into new settings represents the beginning of processes of appropriation, hybridisation, and identity formation. Manning and Hulin (2005: 271) point out that while much energy (and money) has been spent by archaeologists to obtain data related to the provenience of imported objects, such information may be of little relevance to a social-archaeological approach because they only focus on production and distribution, and ignore local systems of value. As recontextualisation and hybridisation have been outlined above, I turn now to the connection between consumption choices and identity formation.

In what follows, the term social identity refers to those vectors of personal identity that occur *within* a given society, such as class (rich vs poor, politically powerful vs disenfranchised), gender division (masculine vs feminine spheres of action or appearance), or age group (e.g. when an individual is considered an adult). Corporate identity, by contrast, refers to the distinctions *between* different societies, i.e. the identity shared by every member of a given society, which cross-cut social identity vectors. Often corporate identities (and the archaeological complexes that define them) are simply equated to ethnic identity, although there is little agreement what ethnicity means in a prehistoric context, or how such ethnic groups were created (Jones 1997: 13). Furthermore, interpreting ethnic identities with archaeological data is extremely difficult, given its fluidity and situational nature, and because in any given society only a select set of materials are used to promote such an identity (Knapp 2008: 63). The problem with acculturative frameworks like Mycenaeanisation, as outlined above, is that they assume inevitable changes on the macroscale of corporate identities, rather than engage in specific encounters, and the potential for contact to influence more restricted social identities.

When a community decides to adopt influences beyond their local experience, there are many choices available to them. To begin with, is the material, practice, or idea

acceptable 'as is,' or does it need to be adapted or naturalised in some way to be suitable and satisfactory to local needs? This can of course lead to hybridised materials and practices as outlined above, and radically new associations than those of the source of influence, re-contextualisations such as those illustrated with the consumption of Barbie dolls in Mexico. A basic question to be asked of foreign materials may be: for what sphere of activity is such an object suitable? For example, an object intended for everyday activities by its producer society could, at a distance, be imbued with exotic connotations that render such mundane usage inappropriate. In such a situation there may be a restriction of access to the exotic item, or it may be used in more specialised contexts.

Although the present study does not involve colonisation or significant co-habitation, there is still the potential for the consumption of foreign materials to affect social identities, if not generally corporate ones. While it may be easy to envision a colonial situation where intermarriage produces a population that is neither colonial nor indigenous (i.e. a biological third space), and thus even create new corporate definitions, cultural encounters do not need to be so intensive to affect social identities. In fact, material appropriations could very well serve as mechanisms for maintaining corporate distinctiveness – a way to preserve differences with other societies even while accepting cultural input from them. Foreign materials or ideas are naturalised to fit within the corporate body, inventing new traditions (Hobsbawm 1983), while at the same time corrupting the various social identities that make up the corporate whole. For example, a restricted exotic item has the potential to help develop, maintain, or redefine class relationships, with elites defining their status by the privileged consumption of such materials. Such an object, however, may be promoted as a legitimate part of local cultural norms through its physical adaptation (i.e. a material hybrid), or its radical re-association with local traditional practices. Thus the new object becomes traditional, and, although it may change the definition of acceptable elite behaviour, it actually asserts the cultural distinctiveness of the group as a whole.

Consumption is not a catch-all process, even within the same cultural encounter, and any analysis of the choices made within certain island communities needs to assess the relevant contextual information in order to tease out the specifics of consumer behaviour. This involves such issues as who is included or excluded from consumption (and the identity implications therein), differing consumptive contexts for the same materials within the same settlement, or any differing contexts of consumption over time (e.g. practices that become ultimately less foreign with an increase in cultural encounters). Another important

caveat for this study is that different contact situations will entail different consumptive needs or desires. For example, the highly stratified Nuragic settlements of Sardinia may have had markedly different aims in acquiring exotic items than the (relatively) egalitarian coastal communities on Sicily. Furthermore, those interacting directly with foreign peoples on "the beach" (Dietler 1998: 297-98), where cultural differences must be dealt with as a social reality (Manning and Hulin 2005: 281), may be enmeshed in appropriations and rejections of a more intensive nature, as opposed to local groups that receive foreign materials via secondary local networks. For these latter societies, such exotica may be received as already naturalised (and re-contextualised) materials, in that they have already been appropriated by others who fall within a shared (or similar) cultural milieu, perhaps even a self-recognised, shared corporate body.

2.1.4 Trade and 'Geographies of Mobility'

While it was mentioned above that cultural encounters tend to be structured, if not deterministic, the specific structures involved during the last half of the 2nd millennium BC in the central Mediterranean still need to be assessed. In other words, knowing what form contacts took (e.g. migration, colonisation, exchange, warfare), and how such scenarios affected the consumption of foreign materials, is vital to understanding any developments that occurred as a result. Certain types of interaction involving the large scale movement of peoples (i.e. migrations, the establishment of colonies) have been almost universally rejected for the central Mediterranean for this time period – we simply do not have the quantity nor variety of data to support such hypotheses (Smith 1987: 158-59). At most, the existence of certain classes of people, such as maritime merchants or itinerant artisans, can be said to represent the maximum extent of foreign presence in otherwise local communities (Dyson and Rowland 2007: 100; Jones *et al.* 2005; Jones and Vagnetti 1991). There are no foreign colonies, nor even foreign enclaves within indigenous settlements, detectable in the archaeological record (Blake 2008: 1).

When it comes to the presence of exotica on Sicily and Sardinia between 1450 – 900 BC, there are few archaeologically testable certainties. One might be the identification of such objects as extra-insular items, which can be ascertained by an analysis of both the raw materials used, as well as the technologies of manufacture. When these features stand distinct from local materials and practices, one can say with some confidence that the objects under question are indeed imports. As we are dealing with islands, another certainty is that these objects had to be acquired via maritime routes; that is, ships were

involved. When it comes to assessing the specific agents of mobility, however, or the specific form the transactions that provided these imports took, there is no archaeological certainty, and consequently little consensus amongst archaeologists (Manning and Hulin 2005: 282). It is argued here that the imports in question were transported by independent middlemen traders, of ambiguous geographic or corporate identity (Gillis 1995: 62-65), and that, most often, transactions took the form of commercially motivated exchange. For the former assumption, it is possible to draw on ethnographic analogies concerning the identities involved in extra-regional exchange, as well as the cargo of the few known LBA shipwrecks, whose heterogeneous cargoes defy a straightforward correspondence to any specific geographic or cultural source (Pulak 1998: 216). The latter assumption of trade transactions is more difficult to assess, particularly in the absence of supporting texts, and other types of non-commercial exchange (e.g. gift giving, diplomatic transactions, booty) cannot be dismissed as alternative methods of distribution, even if trade is assumed to be the most common form of transaction. These varying forms themselves can overlap, such as a diplomatic exchange that has a commercial motive at its base (Manning and Hulin 2005: 274), and the nature of the encounter may change over time, as the relationship between the islander communities and the agents of exchange develops.

Trade, like acculturation, is a conspicuously vague term. One archaeological definition – "the procurement of materials from a distance, by whatever mechanism" (Renfrew 1977: 72) – may conveniently describe all the foreign materials under discussion in this study, but like acculturation it also masks the variety of forms that such encounters can take. Still, the word procurement does offer a sense of local agency in the process, so trade will suffice as a convenient starting point. Such commercial exchanges can vary in the intentions of the mobile party, which lie along a continuum of directed versus nondirected contact (Alexander 1998: 482) – that is, whether or not they seek to control the local population economically or politically. Furthermore, such structured contacts will fall along a spectrum of antagonistic to consensual. In traditional frameworks, heavily influenced by more modern colonial processes, the direction lines of exchange go decidedly from an eastern Mediterranean 'core' to a central Mediterranean 'periphery.' (e.g. Bietti Sestieri 2005: 13, fig. 3). This has been partially justified by the scarcity of recognisable central Mediterranean goods found in the Aegean and other eastern regions. The problem with such unidirectional representations, however, is that they do not make sense within the context of exchanges. For any eastern Mediterranean goods found in central Mediterranean places something must have been exchanged in return, otherwise the lines on the maps would indicate that eastern Mediterranean goods were dropped off, and

empty ships returned home. In addition, such lines give the impression of the direct involvement of traders from the east at every coastal point of entry in Sicily and Sardinia.

The lack of central Mediterranean exports in the east is often resolved by the assumption that whatever was exchanged did not leave an archaeological signature: perishable consumables (e.g. grain, alum, murex shells), raw materials that would have been transformed into eastern-looking finished goods, or even slaves. These hidden data have been extrapolated in the eastern Mediterranean with the help of textual evidence (Knapp 1991; Gillis 1995: 68). While there is nothing wrong with this assumption logically, it leaves little room for discussion in an archaeologically-based study, and there are no supporting texts to look for complementary evidence in the central Mediterranean. By looking at other patterns of mobility and methods of exchange in the MBA and LBA, however, the invisibility of central Mediterranean goods can be contextualised further, and the need for Sardinian or Sicilian goods to be involved in long-distance trade somewhat ameliorated.

The distribution of eastern Mediterranean goods may indicate that eastern-based ships only visited a handful of ports in the central Mediterranean (Knapp 1990: 143; Harding 1984: 258). Such ships were not likely a part of any palace-sponsored trading ventures, but rather involved more-or-less independent entrepreneurs with more flexible agendas (Militello 2005). From a few coastal entrepôts, a secondary network of tramping vessels (i.e. smaller boats that travel along the coasts, stopping at almost all ports of call – Braudel 1972: 104, 107) could have distributed exotica, along with local and regional material, in and around the central Mediterranean (Harding 1984: 256). Secondary lines of exchange would also have existed on land, distributing goods from the coast to the interior. This secondary exchange system does not preclude the possibility of archaeologically invisible material being exchanged at the entrepôts, but at the same time it qualifies the need for the significant presence of central Mediterranean goods in the east. It does this by eliminating the need to interpret an eastern ship at every coastal site where Aegean or Cypriot materials have been found (cf. Gillis 1995: 62). Instead, if we assume that many of the actual transactions involving foreign objects were between communities native to the central Mediterranean, where one of the parties has previously acquired such materials from one of the few entrepôts, then archaeologically we would only need to see, for example, Sicilian or Sardinian goods circulating within the central Mediterranean.

Secondary networks of middlemen traders also help to explain both the distributive drop-off seen between coast and interior, as well as the lesser amount of eastern material

found the farther west we look. If eastern Mediterranean maritime agents were personally involved throughout the central Mediterranean, we might expect to see conspicuous amounts of eastern goods sprouting up in unusual places more often than we do. As it is, the distribution pattern that we can see on the basis of current archaeological evidence tends to support a steady decline in eastern goods as the distance increases. For example, southern Italy has more Aegean pottery than eastern Sicily, which has more than southern and western Sicily, which has more than Sardinia. (Antigori is a notable exception to this trend, and as such, represents one of the case studies in Chapter Four). This simplistic distribution pattern ignores the chronological component (e.g. more western areas like southern Sicily and Sardinia do become more heavily involved in the acquisition of Aegean pottery from the 13th century BC), although southern Italy, the most proximate region to the eastern Mediterranean, has produced the most evidence in every phase under consideration. Therefore, it is certainly possible that at key ports in southern Italy ships were present that had actually visited Aegean ports, and had brought Aegean goods directly to the central Mediterranean. How much this constitutes an Aegean presence in Italy is a debatable point. The mixed nature of the cargo seen in LBA wrecks may also represent a mixed crew (Gillis 1995: 69-70).

Distance is also socially constructed, and if an area is perceived to be more strategic in terms of what it can offer, or with whom it is connected, this can compensate for the greater expenditure needed to interact with it. For example, Malta is much closer to the Aegean than Sardinia is, but the latter has produced much more Aegean and eastern Mediterranean imports. This could result from the desire for Sardinian natural resources, such as copper ores, or the fact that it was involved in exchange networks that connected it to areas farther west, such as the Iberian peninsula and Atlantic coast. Malta, on the other hand, seems to have interacted primarily with nearby Sicily, and is not known as an archipelago rich in raw resources. There would, therefore, be little incentive for eastern agents to interact directly with the communities of Malta, or for secondary networks (aside from those based in Malta), to go farther than Sicily.

It remains uncertain how Aegean and other eastern Mediterranean goods found their way to the central Mediterranean (Blake 2008: 3), whether their presence should be considered as a by-product of direct contact with foreigners (Alberti 2005: 343), or with other middlemen traders, and just what sort of corporate identity – if any – should be assigned to such mobile agents. This study advocates an active distinction between foreign goods and foreign peoples: the presence of exotic items in isolation, even ones with certain

provenience, tells us nothing about the specific agents of mobility. As Gillis (1995: 63) stated: "The idea of direct contact between the country of origin of an object and its findspot is often implicit...Must there have been a connection?" Terms like 'Mycenaean,' used to indicate a self-aware, coherent, corporate group, tend to disguise the multiplicity of groups, individuals, and motivations inherent in multi-scalar systems of interregional exchange. If the presence of such groups is itself not certain, then any frameworks that promote a process of Mycenaeanisation in Sicily or Sardinia are based solidly on subjective assumptions. Even if the presence of eastern peoples (of any label) was certain, (and it would be equally misguided to posit that such agents were always absent), stressing the influence of such presence based solely on the existence of foreign 'things' ignores everything that happened to that object in its receiving society between the time such exchanges were complete and the moment of the object's final deposition. Any foreign influence felt by that time would have had to linger long after any physical foreign presence. As van Wijngaarden (2002: 27) astutely observed, the deposition of most archaeological material does not often reflect any exchange context, but rather "patterns of use and discard by consumers."

The mobility potential of Sicilian and Sardinian societies themselves needs to be considered. The attitude that these islanders were somewhat 'thalassophobic' has had an impact on the interpretation of extra-insular contact (Leighton 1999: 208; Dyson and Rowland 2007: 100). Is there any evidence, however, that might suggest the maritime capabilities of these islander societies has been somewhat underestimated? Even if they were not conducting long sea voyages themselves, for which we lack sufficient Sicilian or Sardinian materials outside of the central Mediterranean, is there any room to speak of their maritime movements within the region? There are no MBA or LBA wrecks in the central Mediterranean to provide direct evidence for a Sicilian or Sardinian maritime technology, or existing networks. This lack is felt throughout the Mediterranean, however, and even when such ships are found (i.e. the Uluburun and Cape Gelidonya wrecks off the southern coast of Anatolia) there is great debate concerning the 'ethnicity' of the ship, its crew, and its cargo (Blake 2008: 3). Even if a shipwreck was found off the coast of Sicily or Sardinia, it might immediately be identified as an eastern Mediterranean ship, because of the reluctance in current scholarship to acknowledge islander mobility

There is, however, indirect evidence that these islands were active in seaborne communication in the central Mediterranean, and had been for centuries before the Middle or Late Bronze Age. There is evidence for the early spread of Sardinian obsidian (from its

source of Monte Arci) to several other parts of the central Mediterranean, including Corsica, Ebla, northern Italy (Dyson and Rowland 2007: 26), and by the Middle Neolithic, southern France (Tykot 1999: 73). This raw material could only have been transported by boat, likely by sailors from Sardinia or Corsica. From a much later period, we have the evidence of boat representations, cast in bronze, from both Nuragic and Etruscan contexts. The chronology of these bronzes is disputed, with some favouring a 1st millennium BC Iron Age date, while others would place them in the LBA (Lo Schiavo 2000: 143-44). Of particular interest is the representation of a mast on some of the boats, indicating a familiarity with sailing vessels on behalf of the Sardinian metal workers (Lo Schiavo 2000: 152, fig. 7.3).

As for Sicily, there is evidence of involvement in the Bell Beaker culture at the end of the 3rd millennium BC, particularly in the west of the island (Tusa 1999b: 149-52), as well as with obsidian producing areas, like Pantellaria and Lipari, during the Neolithic (Patton 1996: 146). This only demonstrates that foreign objects were coming to Sicily, not necessarily that the islanders themselves were involved in any mid- or long-range shipping. As Harding (1984: 258) points out, however, the complex exchange systems that existed between the island, the Aeolian archipelago, and the mainland by the LBA, and the "sophistication of cultural development" seen in the material remains of Sicilian indigenous communities, would no doubt have been represented in its nautical ability as well. This study, therefore, makes as an *a priori* assumption that Sicilian and Sardinian boats were capable of making medium-length journeys within the central Mediterranean, if not farther abroad.

Interpreting more active and mobile islander societies also has the benefit of counteracting any notions of a Bronze Age world system, where an eastern Mediterranean core exploits a central Mediterranean periphery. World systems models were originally developed to explain the geographic division of labour which developed in response to the spread of industrial capitalism (Wallerstein 1974: 349-50). In this division, core states are wealthy, bureaucratic, and complex, and engage in capital-intensive forms of labour, such as supporting highly-skilled artisans not directly involved in day-to-day subsistence activities. By contrast, peripheries are characterised as being less centralised and bureaucratic, being governed by autonomous "weak local rulers," and principally focus their economic activity towards low-skilled, labour-intensive pursuits such as the extraction of raw materials (Stein 1998: 223-24). The cores are able to economically manipulate the peripheries and their weaker political institutions, and relationships

between elite members of each tend to be characterised as exploitative and dependent. In such models, Aegean or Near Eastern polities represent more complex and diverse socio-economic units, which trade luxury (or at least higher status) finished products in exchange for raw materials from the less developed central Mediterranean societies (Stein 2002: 904).

On the surface, it would appear the Middle and Late Bronze Age Central Mediterranean would be ideal for interpreting a core-periphery relationship. There were unequal political institutions: Aegean and Cypriot early states (Militello 2005: 587) versus the chiefdoms of Sicily and Sardinia (Leighton 1996b: 107; A. Usai 1995: 254). Craft production was typically more complex in the eastern Mediterranean, and such high-valued goods do occasionally turn up in central Mediterranean assemblages. There are selective instances of the imitation of eastern Mediterranean products, such as locally-made versions of Late Helladic pottery, other local pottery that seems to have had certain formal features borrowed from eastern ceramic prototypes (D'Agata 2000), and bronze objects that appear to betray familiarity with eastern (especially Cypriot) objects (Lo Schiavo et al. 1985). Such imitations and influences could speak of a certain desire on behalf of central Mediterranean elites to modify the definition of their social positions via access to esoteric forms of production and display (Kristiansen and Larsson 2005: 17). Finally, there were valued raw materials in Sicily and Sardinia, such as sulphur and copper (Castellana 1999: 423; Ferrarese Ceruti and Assorgia 1982: 171), which could have been exchanged by such elites in return for desired prestige objects.

How effective, however, will any exploitation at a distance be in the Middle and Late Bronze Age central Mediterranean in the absence of any colonial infrastructure, and when the identities of the agents of mobility are themselves obscure? We do not know how involved Mycenaean elites were in the process of extra-regional exchange, beyond being the consumers of exotica themselves. If, as is commonly proposed, eastern Mediterranean goods were conducted to the central Mediterranean by either independent, middleman traders (Gillis 1995: 62; Militello 2005: 586-87), or re-distributed via secondary, local systems of exchange (Harding 1984: 284; Horden and Purcell 2000: 140), how could such individuals (without obvious state backing) have influenced the economic orientations of the communities they dealt with in any significant way? Furthermore, it is not archaeologically evident that Sicilian or Sardinian societies were actively producing surplus raw materials for export. The amount of copper being mined in Sardinia during this period is nearly impossible to measure archaeologically, and there are some indications

that extraction did not exceed what would have been required for local consumption (Bartoloni 2009: 11; Webster 1996: 136). In fact, it is in the presumed *core* area of Cyprus where such copper surpluses were being generated, some of which apparently made its way to Sardinia (see 4.4 and 5.1.2). This is the opposite direction for raw materials to flow in a typical world systems framework. In the end, it would appear the moderate amount of exchange archaeologically evident between the Aegean and the central Mediterranean (see section 5.1) would preclude the significant re-structuring of society or the economy in the latter, as demanded by a world systems framework.

Although few modern archaeologists would posit any kind of political control, along the lines of colonial administration, for the Middle or Late Bronze Age in Sicily or Sardinia, there is still an implicit assumption of foreign economic influence leading to social changes in islander communities and, for Sardinia in particular, occasionally the suggestion of Cypriot management of mining activities (Stos-Gale and Gale 1992: 336). If the presence of such overseers is called in to question, however, and the ability of islanders themselves to take an active role in the procurement and transportation of both raw materials and finished products is recognised, it becomes difficult to maintain a framework of exploitation required for world systems models. In response, those who posit a Bronze Age world system tend to water-down the concept, claiming the dependency inherent in a modern, capitalistic world system was not a feature of the ancient system (Kristiansen and Larsson 2005: 6). Without such dependency, however, in what way is the economic relationship between Bronze Age cores and peripheries linked? Without the dependent, exploitative relationship, the label 'world system' hardly seems to fit, and even Wallerstein, who developed the conceptual framework of the modern world system, had serious reservations about its application to pre-capitalist systems or to archaeological models (Harding 2000: 418; Stein 2002: 904).

There is ample evidence of the local manufacture of at times quite sophisticated finished products in the central Mediterranean to counteract any assumption of a "regional division of labour" (Dietler 1998: 296) predicated on the extra-regional control of islander economies. More recently, especially in the realm of metallurgy, the products of Sicily and Sardinia have been interpreted as having currency throughout the Mediterranean (Lo Schiavo 2003: 28; Bettelli 1999), which goes against the stream of any world systems interpretation. Finally, would objects like Late Helladic painted pottery be regarded as prestigious, or at least luxurious enough to convince central Mediterranean elites to change the focus of their economies? While such objects may be given a certain value based on

their relative scarcity, and perhaps technological superiority compared to similar local products, this does not seem to be enough to qualify as prestige goods (van Wijngaarden 2002: 26-27).

The processual language of commercial contacts is largely avoided in the present study. This includes the classification of sites as 'ports-of-trade,' 'gateway' communities, or 'emporia' (Polanyi 1957: 263; 1963: 30; Burghardt 1971; Hirth 1978). These labels are often used uncritically, without any attempt at definition (e.g. De Miro 1999b; Castellana 2002: 143; Ferrarese Ceruti et al. 1987: 37). When some attempt at clarification is made (Smith 1987: 58-63) the definitions become so esoteric as to reflect only historically specific instances, with broader applications becoming nearly impossible. Furthermore, the lines between certain categories (e.g. a 'port-of-trade' vs an 'entrepôt') become so blurred that they actually frustrate the tendency to categorise such settlements in the first place. For the purposes of this investigation a community is either involved in extra-regional exchange (if it has foreign materials) or it is not. An important caveat, however, as Gillis (1995: 61) points out, is that involvement in trade need not mean involvement in shipping. A community only needed to be open to exchange; it did not require its own merchant fleet. Indeed, there is no attempt to interpret agents of mobility specific to a given settlement, such as 'Thapsos ships' plying trade along the east coast of Sicily or south to Malta. It is impossible to identify the agents of mobility with such precision in the archaeological record, and to do so would be just as misguided as labelling boats 'Mycenaean' or 'Cypriot.' If we posit independent, middlemen traders, or consider the possibility that all coastal regions were involved – at some scale – in networks of exchange, such geographic assignments become unnecessary (Harding 1984: 258).

2.1.5 Connectivity/Insularity and the Development of Elite Identity

Because identity is very often the by-product of reproductions of difference, it is intimately related to the concepts of connectivity and insularity. Connectivity is the more straightforward term, and it is used here to indicate the amount and kinds of contacts that islanders had with extra-insular societies, as well as to engage with the idea of islander mobility (i.e. in this study, contacts between islanders and foreigners that occur outside of Sicily or Sardinia). As the present study involves connectivity from the perspective of islander societies, maritime mobility, technology, and seasonal variation play a role in the level of contact possible, and the distances that could be plausibly travelled (Broodbank 2000: 89-101). Connectivity discussions must involve an assessment of the balance of

power between parties, as well as charting any changes in the contact situation over time. As mentioned above, the hybridisation framework followed here is well suited to the diachronic analysis of connectivities between islander societies and outsiders, and directly addresses the issue of power relationships, as well as the effects such contacts have on social identities.

Insularity is a more problematic term, and as Knapp (2008: 18) illustrates, it can refer to geographic traits as well as social situations. While it may literally refer to the state of being on an island, it has been observed that certain mainland areas – high mountain passes, desert oases – may be more geographically insular than an island connected by simple sea passage from the mainland (e.g. Sicily) (Braudel 1972: 160-61; Broodbank 2000: 16). Therefore a definition of insularity must address its social aspect – that isolation is relative, open to manipulation, and may have been used as a tool by prehistoric islander societies as an active form of corporate distinction (Patton 1996: 33). In reality, such segregation is always relative, and it is extremely rare for human societies to live in absolute isolation for any length of time (Cusick 1998b: 3).

While few islander societies generally fit into an 'Easter Island' model of complete isolation, at certain times and places in the Mediterranean the conspicuous absence or severe restriction of foreign materials may well represent an attempt by island societies to differentiate themselves by shunning the 'corrupting' sea, while maintaining local "regimes of value and truth" (Broodbank 2000: 345). Neolithic Malta, with its idiosyncratic temple complexes, is often cited as just such a case of intentional isolation (Robb 2001). There is a relative scale between close connectivity and complete isolation, and the MBA – LBA central Mediterranean would not have been placed close to either extreme. In relative terms, Sicily has been considered the more connected island, and Sardinia the more insular, but this should be considered in a more diachronic framework (e.g. Bietti Sestieri 2005). Moreover, when western Mediterranean connections are taken into consideration, the insularity of Sardinia, even in comparison with Sicily, needs to be reconsidered.

There is in fact an 'island paradox': while in name (and common modern imagination) islands are isolated and removed, when such places find themselves in the midst of wider networks of interaction they actually become places of strategic connectivity and conspicuous interaction (Braudel 1972: 150; Sherratt and Sherratt 1991: 358; Knapp 2008: 20). Patton (1996) outlines two categories of the connectivity/insularity spectrum for Mediterranean, which he terms 'exchange-oriented' vs 'monument-oriented'

societies. This dichotomy is not meant to reflect a categorisation of some islands under the monument rubric, and others into the exchange label; rather, he postulates that many Mediterranean islands go through periods of being more monument-oriented or more externally-focussed (Patton 1996: 96). This is not an evolutionary progression: the examples of the Balearic Islands and Sardinia/Corsica illustrate two cases where a monument building phase is sandwiched between other periods of greater external contacts (Patton 1996: 95-104). Admittedly, this sounds like more of a descriptive model than an explanatory one, and Patton (1996: 89) is careful to avoid any notion of insularity causing monumentality, through some ill-defined process of conservatism. Indeed, such an interpretation would ignore the evidence for contact that continues to exist in the Talayotic period in the Balearics, and the Nuragic period in Sardinia, during the height of their respective monumental building phases. Instead, he concentrates on the fluctuating value of exchanges with extra-insular peoples in "the establishment and maintenance of power relations" over time (Patton 1996: 96). In this, Patton foreshadowed the consumptionbased approach advocated in this study: the relative value of appropriating and manipulating exotic items in the development of islander identities.

Elite identity is particularly implicated in this spectrum of monument or exchange oriented societies. This is because the powerful or wealthy are more able to construct monuments, whether for private or public use, and are more able to restrict access to foreign materials, especially luxury items (Hodder 1982: 204; Smith 1987: 55). In addition, elite classes are more likely to be the intended market for long-distance trade, and may have more ideological incentive for acquiring exotic objects or building impressive monuments. Such actions perform a dual role: they allow elite members of society to stand distinct from their subordinates, while at the same time defining what such status entails; and they legitimate their privileged positions through their ability to construct monuments, or control exchanges. Naturalising any appropriated foreign objects, as mentioned above, serves to make whatever definition of elite practice being promoted more acceptable to the society at large. In such a way elites become "active receptors and manipulators" who use "acquisition from a distance to create localized 'otherness' and exclusivity" (Manning and Hulin 2005: 275).

The elite involvement in exchanges, more so than their ability to construct monuments (assuming such buildings are local phenomena, and not foreign influences, which appears to be the case for Mediterranean prehistory – Patton 1996: 103-104), is more properly the focus of this study of the impact of material connections. This brings up

an important question: at what level, or on whose behalf, did extra-insular exchanges take place? Did Middle and Late Bronze Age representatives in Sicily and Sardinia acquire foreign materials on behalf of their community, or more personally, on a household or individual basis? This potentially affects the power dynamic of exchanges, with individuals interacting on a more-or-less even footing with traders (i.e. 'symmetrical exchange' -Alexander 1998: 486-87), while exchanges on behalf of the community, the type more likely undertaken by elite members or their representatives, may create a situation that privileges the consumers. Unlike the situation in the central Mediterranean, the eastern Mediterranean during the LBA has the advantage of texts, which illustrate multi-scalar levels of exchange involving 'great kings,' 'lesser kings,' their agents, and even private enterprise (Liverani 1987: 66, 70). Could the context of foreign objects in the central Mediterranean, however, help to identify at what level such exchanges were undertaken? It could be argued that exotica found in tomb contexts are more likely to reflect the consumptive behaviours of individuals or single families, hence symmetrical exchanges. On the other hand, foreign materials recovered from public buildings (cult areas, public gathering spaces) might be interpreted as objects acquired on behalf of the community at large, presumably by its leaders. In domestic contexts, one would have to determine whether such dwellings are considered to be elite or not.

Finally, the question of how values are assigned to extra-insular objects needs to be addressed. On the one hand, it is important to remember that just because an object is foreign does not necessarily make it a luxury item, and may have little to do with elite activity. On the other hand, the reverse situation could be equally true, where a more mundane object from the producer society is given exotic importance at a distance, and is consumed as an exclusive item. Hodder (1982: 205) cautions that wealth is not always convertible between societies – what is considered valuable in the producing society may not be so in the consuming society, and vice-versa. For many scholars dealing with foreign materials in the central Mediterranean, the importance or status of imports is often assumed but not actually argued (Manning and Hulin 2005: 271). We must be conscious of avoiding a circular interpretation, where elite activity is assumed by the presence of foreign objects, and foreign objects themselves are given value because of the perceived involvement of elite agents. These problems of interpreting elite identity are even more pronounced in Sicily, where an absence of monumental building, or of contrasting assemblages, makes even identifying an elite class difficult. Often, it is the presence of exotic items alone that signifies the existence of the elite in traditional models of Sicilian prehistory (Alberti 2006).

2.2 Methodology

In order to assess the nature of material connections in the central Mediterranean, a solid grasp of the sites and objects involved is necessary. This involves both interpreting the raw numbers (with respect to sites, artefacts, and materials), and understanding local contexts, in order to measure patterns of consumption through space and time. The following describes the database employed, the means of comparing data from the local, consumption-perspective, and supplementary ways of finding the hidden data in the material record, which may have been misinterpreted or ignored.

The primary approach adopted here is a critical re-evaluation of previously published materials that relate to cultural encounters on Sicily and Sardinia during the second half of the 2nd millennium BC, and a re-interpretation of the relevant data using the more progressive models of cultural encounters outlined in this chapter. It does not rely on new evidence from more recent excavations or surveys as the basis for proposing a new model of cultural encounters; rather, the local, consumption-based approach advocated here informs all evidence, old and new, and constructs novel ways of reading the materials through which island communities created and negotiated their various identities.

Beyond published materials, I undertook two one-week research trips to Sicily and Sardinia, to view key sites and museum collections, and to network with scholars working on relevant assemblages. On Sicily, I visited the site of Thapsos and went to the Paolo Orsi Museum in Siracusa to observe the materials from that site, Pantalica, and Siracusa itself. I also made use of the library of the Department of Archaeology at the Università degli Studi di Catania. On Lipari, I was able to visit the Bernabò Brea Museum, and examine the remains of the acropolis settlement outside the museum. On Sardinia I visited Nuraghe Antigori, Nuraghe Domu 'e S'Orku, and Su Nuraxi (Barumini). I examined the collections at the National Archaeological Museum in Cagliari, which included material from Antigori and Domu 'e S'Orku, as well as the material at the Casa Zapata museum, which houses the finds from Nuraghe Su Nuraxi. I also attended the 2009 annual meeting of the Istituto Italiano di Preistoria e Protostoria, and was able to get information on recent finds, particularly oxhide ingot fragments.

2.2.1 Database of Material Connections

A database has been constructed in order to gauge the quantity and duration of foreign contacts for Sicily and Sardinia, as well as assessing regional patterns. This database can

only provide information on the actual presence of likely extra-insular objects; by itself, it cannot describe by what means such objects (or object-influences) were brought to the island, or by whom. For such an analysis, relative patterns of consumption are used to provide clues (see below). The figures derived from the database enable both a chronological and spatial analysis of foreign material, which in turn makes it possible to put such evidence into perspective, both as amounts of eastern and central-western materials relate to each other, and as foreign materials relate to local assemblages.

The database is divided into four tables, differentiated by island, and by whether the materials in question reflect contact or influence from the eastern Mediterranean, or from the central and western Mediterranean. All four tables have the following fields: location (of find); (modern) province; type of site; dates (absolute and relative); artefact type; description; amount; depositional context; provenience; and confidence of provenience. The location field is self explanatory, while the modern province is included as a vague indicator of specific regions that are either conspicuously involved or not involved in foreign contact. Some caution must be exercised here, as such distinctions may also reflect varying levels of activity by particular regional archaeological services. The type of site is generally broken down between settlements and tomb contexts (i.e. objects for everyday use vs. objects reserved for special/ritual functions), although other distinctions, such as sanctuary or hoard contexts, are also made. The artefact-type field provides a broad label (pottery, metal, or sundry), and the description field deals with any pertinent supplementary information, such as specific material or shape. Dates given are, wherever possible, based on archaeological contexts, although because many sites in Sicily and Sardinia have only received partial and selective publication, such contextual dating information is often lacking. In these instances, dates are based on typological considerations. The amount field is self-explanatory, although for some sites totals have only been vaguely offered (e.g. 'some', 'a few', 'significant amounts'). When these amounts are used to perform statistical analyses (see 5.1), the uncertain totals are, by necessity, excluded.

Provenience and confidence (i.e. of provenience) fields deserve special mention, as the first distinction is often only tentatively made or assumed, usually based on visual inspection, without any archaeometric analysis in support. For this reason a confidence level is assigned: four for certain provenience (i.e. the object has undergone some kind of acceptable source analysis); three for likely provenience (i.e. the object has undergone some analysis that may vaguely indicate a source, but is not definite, or the visual

inspection is of a good quality); two for unknown provenience (i.e. does not look local, but actual source is obscure); and one for unlikely or dubious provenience (i.e. one that has been strongly challenged by other scholars). Finally, the context field tries to be more specific than the type of site field, listing specific tombs, strata, or buildings if known, and any other objects found with the items in question.

Local imitations of foreign materials have also been included in the database, although they are not strictly foreign. In part, this is simply because it is often difficult to disentangle the number of imitations from the number of imports (e.g., Aegean and Aegean-looking pottery at Nuraghe Antigori). In other cases, the assignment of the imitation label has been based only on visual inspection, and may not be valid. Such inflations of the number of imports is never particularly great in any specific instance, however, and it should be kept in mind that close imitation of foreign styles does tend to indicate some level of contact, in some cases involving technological transfers, and are always found in context with other actual imports. Local styles that seem to be influenced by foreign materials have not been included in the database, however, as the interpretations of influence seem to be fairly subjective and open to debate (e.g. incised figural decoration on local Thapsos pottery). Although not numerated in the database, these interpretations of influence are discussed in the data chapters that follow, in order to assess the consumption choices made (i.e. appropriations and rejections), and to verify if the subjective interpretation of influence is itself valid.

The database helps to put the raw numbers of imported goods into perspective, and illustrates that the emphasis on eastern Mediterranean connections is not warranted. When placed into a diachronic analysis (following Manning and Hulin 2005: 283), the already limited data are further diluted (see 5.1), which challenges an interpretation of deep, penetrative foreign influence. Even if surviving materials only represent the tip of the iceberg of connections between 1450 –900 BC, just how representative is this tip to the invisible whole?

2.2.2 Moving from Production to Consumption, and Finding 'Hidden' Data

The benefits of looking at foreign material from a local perspective have been outlined above, as has the overarching method employed here of re-evaluating previously published sites and materials from a consumption-based point of view. What still remains to be discussed are the specific ways in which this consumption perspective is applied to the data. Placing too much emphasis on the producers and shippers (usually envisioned as the

same party in traditional models – Wachsmann 1987: 108-109) ignores the reality that such parties would likely have had to conform to the social practices and expectations of the indigenous hosts with whom they exchanged (Gillis 1995: 61), and that any ability to influence host societies would have been significantly curtailed by the generally low status of both sailors and those involved in commerce (Manning and Hulin 2005: 271; Curtin 1984: 6). An assumption is made in this investigation that production-based provenience studies tell us less about the spread of foreign influence than they do of developing local tastes (Harding 1984: 229).

One means of determining local systems of value for foreign objects is a greater emphasis placed on context. Investigating specific archaeological contexts is vital to an understanding of any changes in cultural associations or symbolic meanings. For example, an artefact that is found mostly in domestic contexts in one society will presumably have a different meaning if found only in funerary contexts in another. In terms of value, the domestic object may be considered a more day-to-day item, for use by the living, and not given a particularly high status. The tomb object, however, may well be considered only appropriate for particular situations. Thus, context may provide one clue to the relative value of foreign objects in their local setting.

Another key means of assessing the meanings of exotica is to broaden the investigation from a look at any particular object, to see if any patterns of consumption are noted in the local assemblages as a whole. Are any imports associated with other foreign objects, or do they tend to stand alone in their context? Do they have any relationship with a particular local material? Does the introduction of the material replace some other object which was previously employed? One benefit of looking at wider patterns of consumption could be to specify a more accurate sphere of contact. Rather than assume the direct presence of foreign traders based on provenience analyses, this pattern of consumption (e.g. what is accepted, rejected, imitated) may point to a different material connection. For example, it is argued in Chapter Five that at Nuraghe Antigori, the pattern of ceramic production and consumption more properly reflects direct contact with the Italian mainland than with any Aegean maritime merchants.

To understand consumption choices made by islander communities, it is vital to have a decent grasp of both how such communities were organised, as well as what the traditional material features of these societies were 'pre-contact.' The former will allow for a more informed discussion of local systems of value, and the existing social hierarchies into which extra-insular materials were appropriated. The latter is important as it not only

provides a basis to distinguish between local and foreign materials (not always a straightforward exercise), but also to assess the material impact of foreign goods upon traditional objects and practices. To this end, each data chapter features a material overview of MBA Sicily and Sardinia (3.1 and 4.1), which includes a brief description regarding current models of how these islander societies were organised.

A final methodological point to make is the search for what might be called hidden data. This evidence is often the victim of the hyper-specialisation of Mediterranean archaeology: objects that come from, or are influenced by, central Mediterranean societies, but are either ignored or misclassified by scholars who are specialists in their specific region of interest alone. For example, a Sardinian *bronzetti* figure now located in the Castello Ursino Museum in Catania was initially identified as an Etruscan object (Libertini 1936), before an expert in Nuragic material culture was able to positively classify it (Lilliu 1945: 26). Such data may also be misclassified based on the myopic insistence of eastern connections. The use of the vocabulary of Greek Bronze Age archaeology to describe certain material traits and practices in Sicily and Sardinia (e.g. *tholos* tombs, megaron temples) creates a discourse of Aegeanisation that influences future interpretations (see 6.1). To counteract this tendency, no assumption of eastern influence is made when either reading published texts, observing images and how they are labelled, or seeing collections first hand.

Now that the conceptual framework and methodological considerations for this investigation have been outlined, the next two chapters describe the material data specifically, along with current interpretive trends, beginning with Sicily (Chapter Three), which has shown evidence for slightly earlier contact with the eastern Mediterranean than Sardinia (Chapter Four). Even in these (relatively) neutral, descriptive data chapters it becomes clear that current methods of interpretation are unsatisfactory, and based on the narrow reading of a remarkably small data set. A discussion (Chapter Five) follows this presentation of empirical data, where the theoretical perspectives from this chapter are actively applied to the assemblages described.

3 Material Evidence in Sicily

While the thrust of this thesis is not about the archaeology of Sicilian or Sardinian society *per se*, but rather the archaeology of cultural encounters on these islands from 1450 – 900 BC, it is still important to outline briefly the broad aspect of their material culture for this period. This is particularly appropriate in a study that seeks to foreground the native: in order to assess the effects of contact on indigenous materials and practices, the nature of these materials and practices 'pre-contact' must be clear. The phrase pre-contact is itself problematic, however, as there is certainly evidence for contact with extra-insular societies long before the MBA, of which the early 3rd millennium Beaker phenomenon is perhaps the best published case (e.g. Tusa 1999b: 149-58; Leighton 1999: 110-12). The MBA, however, is generally believed to represent a peak in foreign contact for prehistoric Sicily. These contacts involved not only the presence of Aegean and Cypriot materials, but more proximate connections with peninsular Italy, Malta, and Sardinia (Albanese Procelli 2003b: 104-105; Leighton 1999: 147; Blake 2008: 5). As Sicily is strategically located in the middle of the Mediterranean, it was a convenient point of reference for maritime navigation in all directions (Bietti Sestieri 2001: 473).

Scholars studying culture contact in Sicily in the MBA and LBA are much more willing to credit the importance of Aegean material culture in the development of Sicilian society, where Aegean objects are commonly interpreted as evidence for the presence of Aegean peoples (La Rosa 2004). Such encounters are believed to have been systematic and prolonged, with influences that penetrated beyond the coastlines to interior locations (Militello 2004b: 294). Before reviewing the evidence of extra-insular contact, an overview of traditional Sicilian material culture is presented.

3.1 Sicilian Society in the Middle and Late Bronze Age: A Material Overview

Materially, MBA Sicily is commonly referred to as the Thapsos-Milazzese period, based on two well-known, related ceramic facies. The ceramic repertoire is largely dominated by burial evidence (where the most complete vessels have been found) and as a result the Thapsos-Milazzese complex is rather restricted to specialist drinking or dining shapes (Leighton 1999: 173, fig. 91; Alberti 2004: 158, plate II). In fact, burial evidence is much more plentiful than settlement data during both the MBA and LBA, with only about twenty settlement sites investigated (and much fewer adequately published) compared to the

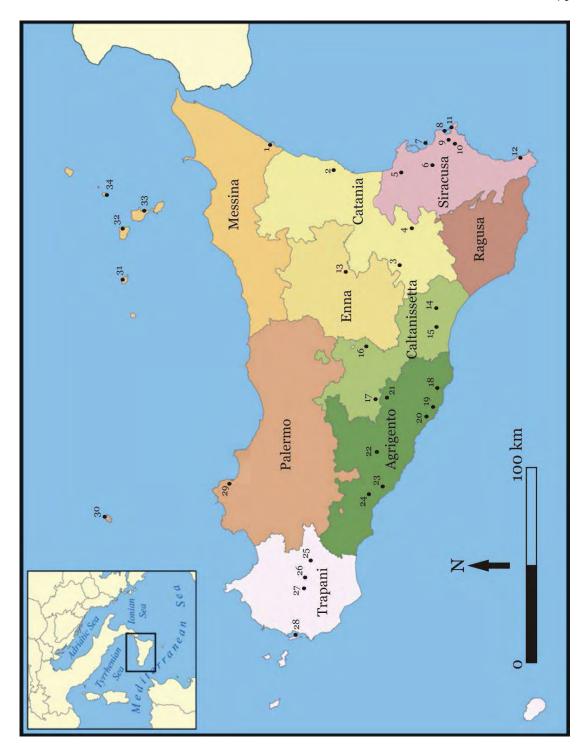


Figure 3.1: Sicilian sites mentioned in the text. 1. Taormina; 2. Monte San Paolillo; 3. Caltagirone; 4. Mineo (Mulino della Badia); 5. Lentini (Metapiccola); 6. Pantalica; 7. Thapsos; 8. Siracusa; 9. Cozzo del Pantano; 10. Cassibile; 11. Plemmyrion; 12. Grotta di Calafarnia; 13. Morgantina Cittadella; 14. Niscemi; 15. Dessueri (Monte Canalotti); 16. Sabucina; 17. Milena (Caldare, Monte Campanella); 18. Madre Chiesa; 19. Monte Grande; 20. Cannatello; 21. Serra del Palco; 22. Sant'Angelo Muxaro (Capreria); 23. Scrinda; 24. Contrada Anguilla di Ribera; 25. Monte Castellazzo di Poggioreale; 26. Monte Finistrelle di Gibellina; 27. Mokarta; 28. Motya; 29. Palermo; 30. Ustica (I Faraglioni); 31. Filicudi; 32. Salina; 33. Lipari; 34. Panarea (Punta Milazzese).

thousands of tombs, many in massive necropolises in the east. The generally betterpreserved burial material therefore dominates museum displays, and may distort our impression of the full spectrum of material practices for this period. More progress has been made, however, in broadening the material repertoire for the end of the 2nd millennium BC, and sites such as I Faraglioni (Ustica) and Lipari have provided important supplementary evidence of MBA domestic pottery (Holloway and Lukesh 2001: 32, fig. 5.1; Alberti 2008a).

Sicilian MBA pottery (figure 3.2) is hand made, although some of its forms can be extremely elaborate. There is clear continuity with Early Bronze Age (EBA) Capo Graziano and Castelluccio ceramic practices, including common shapes, such as raised handled cups and high-footed bowls and cups, as well as the use of incised or raised-band linear decorations. A key difference seems to be the abandonment of matte-painted decoration, which was common in Castelluccian contexts (e.g. Tusa 1999a: 373, fig. 27; Leighton 1999: 139-41). Instead, the incised and raised banded decorations seen in MBA

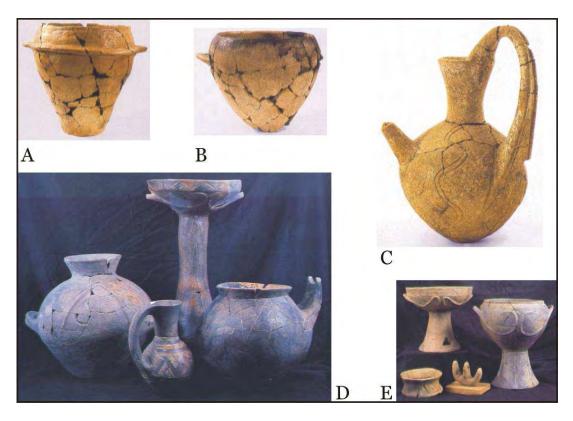


Figure 3.2: Thapsos and Milazzese style pottery. A-B: from Erbe Bianche (Trapani), Hut 5; C: from Thapsos, Tomb D; D: from Lipari Acropolis; E: from Punta Milazzese (Panarea). (A – C after Marazzi and Tusa 2001: 168, 176; D – E after Bernabò Brea et al. 1994: 33, 58).

fineware pottery seem to be more properly derived from Capo Graziano facies practices (e.g. Leighton 1999: 134, fig. 64), and the pottery is often finished with a burnished, brown surface (D'Agata 2000: 65). There are a very few examples of incised figurative motifs on Thapsos-Milazzese pottery, plausibly argued to have been influenced by exposure to

figurative pottery from the eastern Mediterranean (Leighton 1999: 174; Alberti 2004: 133). A new shape in the MBA appears to be the monumental 'lebetiforme' pedestal basin, an elaboration of the EBA footed basin, which D'Agata (2000: 67) notes is often found as part of a funerary set involving the large basin, a dipper, and smaller footed basin. The pedestal basin is also distinguished by a large trapezoidal plate attached to the rim, sometimes referred to as a handle, which is decorated with symmetrical incised patterns and two eyelike projections near the top. As this type of basin has also been found in the settlement at Thapsos (in Room C of Complex B, and just to the northeast of this building – see section 3.3.3 below), it should perhaps not be thought of as an exclusively funerary vessel, but more related to feasting in general (Voza 1973b: 142, 144).

Overlapping the end of the MBA Thapsos-Milazzese facies, and defining the beginning of the LBA in Sicily, is the Pantalica North (mid 13th – mid 11th centuries BC) facies (figure 3.3). Unlike Thapsos-Milazzese ceramics, however, Pantalica North pottery is not as evenly spread across the island, being more prominent in the east. In western Sicily a more conservative tradition of pottery production, with little immediate difference between MBA and LBA forms, has been argued to exist (Spatafora 2001: 143), although such conservatism has been challenged by more recent excavations, where LBA Ausonian



Figure 3.3: Pantalica North style pottery from the Paolo Orsi Museum, Siracusa. (Image source: http://www.archeologia.com/~pantalica/reperti.htm).

and Cassibile-type painted pottery has been recovered (Leighton 1999: 193). Pantalica North pottery is recognised for its red, lustrous finish, and certain new shapes that display a strong resemblance to eastern Mediterranean shapes (see figure 3.14 below), although the Sicilian versions are never painted (Tanasi 2004: 362, fig. 4). This is also the period when the potter's wheel is introduced into local practice, and a level of standardisation commensurate to a workshop level of production (Albanese Procelli 2003b: 82). For Albanese Procelli (2003b: 125) this could be interpreted as an indication of foreign potters in LBA Sicilian communities, present at the invitation of local elites. While the Aegean or eastern Mediterranean could have supplied such craftspeople, as suggested by the above mentioned similar shapes, the transmission of the wheel could also have come via southern Italy, where wheelmade pottery had been produced since the 13th century BC (Jones et al. 2005: 543), and thus reflect an early stage in the movement of peninsular peoples to Sicily. Tanasi (2004: 337-38) recognises twenty-two shapes for the Pantalica North facies, although again we are almost completely restricted to pottery from tombs. As this is a period when imported eastern Mediterranean pottery has largely tailed off (Militello 2005: 593), the Aegean influence seen in LBA Sicilian pottery is thought to have been acquired via influences already absorbed in Thapsos-Milazzese pottery, although Tanasi (2004: 338) recognises certain new introductions not known in MBA local pottery, which he interprets as evidence of prolonged contact with the Aegean in the LBA. Finally, at the end of the Bronze Age, known as the Cassibile period (mid 11th – 9th centuries BC), a new style of painted pottery is found at Sicilian sites, believed to have been an influence from either the Italian mainland or the Aeolian Islands (Tusa 1999a: 603-04). This pottery has a very distinct 'plumed' motif, and is found in both settlement and tomb contexts.

As is evident from this quick summation of Sicilian local pottery, it is difficult to define in strictly local terms, as it is invariably described as being influenced from the Aegean, Cyprus, the Aeolian Islands, or mainland Italy. Some of these comparisons are no doubt valid, as Sicily was very much in the stream of connections during the MBA and LBA, and its ceramic traditions did not develop within a cultural vacuum. Still, the heavy reliance on specialist-function pots with ritualistic significances, and much less focus on everyday coarseware pottery from domestic or settlement contexts, no doubt lends itself to this impression of heavily influenced pottery traditions, with little independent, indigenous development. Leighton's (1999: 176) overall impression, however, was still of a ceramic tradition with "distinctive styles generated by local preferences which maintained independent traditions." The lack of a comprehensive study of Sicilian coarseware pottery has also hindered the development of a robust relative chronology. There has been an

attempt to create a local sequence based on the pottery from tombs (e.g. Alberti 2004, 2007), although since many of the tombs represent multiple burials, close chronological associations are difficult. This more refined chronology, therefore, is still compelled to rely upon uncertain associations with Late Helladic pottery. Alberti's (2008a) more comprehensive study of a wider range of Milazzese pottery in the Aeolian Islands of Filicudi, Lipari, Panarea, and Salina, however, is a positive step, and should be used in the future to develop a relative sequence for Sicily itself.

In architectural terms, it is again difficult to speak of purely Sicilian local features due to the dominance of studies that interpret foreign influences in both settlement and tomb constructions (Tomasello 1996, 2004; Militello 2004a: 314-18). Such influences, involving so-called *tholos* tombs and the unusual rectilinear buildings at Thapsos and Pantalica, are dealt with in the following section (and in 3.3.3). It is possible to discuss some typically local features thanks to more recent research, which has been less concerned with identifying foreign influences in Sicilian practices (Albanese Procelli 2003b: 35-55; Doonan 2001). As mentioned with regards to pottery, however, few settlements have been studied or excavated, and there is a general lack of settlement survey in Sicily (Leighton 1996b: 102). The sites that are known tend to be chance discoveries, early investigations due to the efforts of particular individuals like Paolo Orsi, or, in the case of large necropolises, obvious features in the landscape (Leighton 2005: 262).

In the EBA, although it was once thought that settlements strongly favoured inland locations (Procelli 1996: 92), more recent investigations have shown a widespread distribution of settlement types throughout the landscape, including some coastal locations (Leighton 2005: 262, 267, fig. 3). The choice of location does not appear to have been defence-oriented, but rather related to soil quality and available water (Procelli 1996: 91-92). Procelli (1996: 91) noted that many sites were quite close to each other, suggesting to him the transitory nature of individual sites, as inhabitants would move when resources became exhausted. There are no common patterns between sites regarding the organisation of space, and there is no apparent formal organisation like we see in the MBA (Leighton 1999: 114-16). While there is a variety of sizes for EBA sites, it is not clear that an actual settlement hierarchy existed (Procelli 1996: 92). Some common architectural features include boundary or defensive walls at some sites, and individual huts of various shapes (round, oval, elliptical, and rectangular) built upon stone foundations, sometimes with postholes for timber uprights, benches lining interior walls, and interior space divided

between storage and living quarters (Procelli 1996: 92; Doonan 2001: 168; Castellana 2002: 106-107).



Figure 3.4: EBA site Manfria (A) vs. MBA sites I Faraglioni (B) and Thapsos, northern habitation zone (C). (A after Tusa 1999a: 404, fig. 52; B-C after Doonan 2001: 178, fig. 5).

Beginning in the MBA there is a much greater formalisation of space. This is immediately evident when looking at EBA versus MBA site plans (figure 3.4). There are much fewer sites overall than in the EBA, although it should be remembered that we are comparing an eight or nine hundred year period to a two hundred year one (Doonan 2001: 164; Leighton 2005: 271). A clear site hierarchy is still not evident, but Leighton (1999: 150) is able to categorise different types of site, based more on chosen location than function, although such factors are obviously related (Albanese Procelli 2003b: 35). His categories include: harbour sites on the water; 'seaboard' near-coast sites, many with imported materials; slightly smaller foothill sites; inland hilltop sites; communities that seem to be satellites of large necropolises; and some caves (perhaps cult areas or temporary shelters) (Leighton 1999: 150). Structures within settlements tend to be more densely clustered, and courtyards tend to be walled, yielding a more rigid definition of exterior space (Doonan 2001: 160). The more formal organisation of space may be due to greater inter-community contact, where we see common architectural responses to both the inner-

workings of the community, and local reaction to contact with outsiders (Doonan 2001: 160). For example, at both Thapsos (in its northern habitation zone) and I Faraglioni (Ustica) the respective plans show clearly demarcated 'compounds' of approximate size, containing similar features (huts with benches, open areas, secondary storage buildings), and served by a road/path network (Doonan 2001: 178).

While it was once thought that the LBA could be defined by a large-scale abandonment of coastal sites, perhaps related to the incursion of new peoples from the peninsula (Bernabò Brea 1957: 149; Leighton 2005: 261-62), this has largely been based on dated evidence from eastern Sicily. More recent investigations have shown the continuous existence of coastal centres in the LBA, and the recognition of some new coastal sites, thereby challenging any model that posits a retreat inland for security reasons (Albanese Procelli 2003b: 35; Leighton 2005: 278). A common feature of domestic architecture, noted at sites like the Cittadella at Morgantina (Enna), Scrinda (Agrigento), and Meta Piccola (Siracusa), is the development of the long-house (Albanese Procelli 2003b: 50-52). These generally rectangular structures (figure 3.5) could be up to 20 metres in length, and common features include sunken lime-plastered floors, low benches along interior walls, timber uprights, and wattle and daub superstructures built upon stone foundations (Leighton 1999: 193). The longhouses tended to be internally organised into activity zones, with separate areas for cooking, sleeping, working, and storage.

In the EBA these are the most frequent type of burial, although cist burials, jar burials, inhumation in caves, and dolmen-like tombs are also known (Leighton 1999: 121). The rock-cut tombs commonly involved single chambers of various sizes and shapes (round, oval, rectangular), occasionally with small antechambers in front, entered through rectangular openings (Procelli 1996: 92). The ceilings were flat or arched, and the entrances blocked with orthostat slabs, rubble, a wall of cut blocks, or combinations of these. The exterior façade was usually undecorated, although there are some examples of carved decoration or architectural embellishments like small pillars (e.g. Leighton 1999: 122, 124; Tusa 1999a: 376-79). Procelli (1996: 92) noted a similarity to Maltese practices in the execution of some of these features. The tombs were used for multiple burials, where the most recent deceased was placed in a crouched position in the centre of the chamber, with earlier burials moved to the edges (Leighton 1999: 130). The goods accompanying the deceased were usually personal items, including beads of various materials, tools such as

knives and axes, and a modest amount of pottery (Tusa 1999a: 379). Sometimes grave goods were found outside of the tomb, suggesting a ritual space (Procelli 1996: 92). As

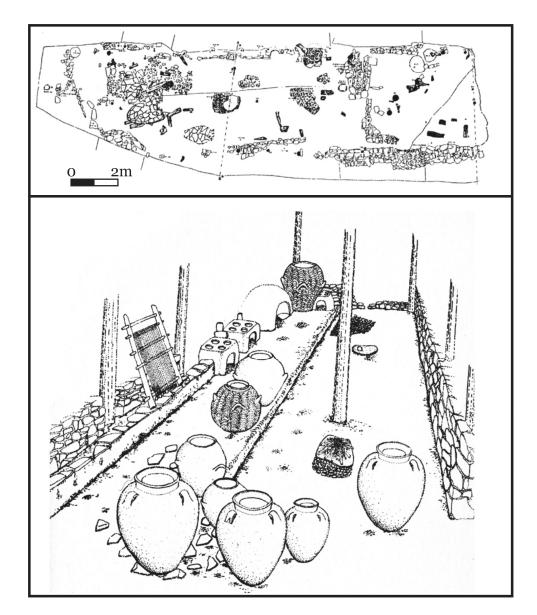


Figure 3.5: Long-house from Morgantina Cittadella, plan (top) and reconstruction (bottom). (After Leighton 1993: 38-39, fig. 18; 45, fig. 22.)

these were multiple burials, often with uncertain associations of materials and human remains, it is difficult to distinguish the status of any particular individual in the tombs, and distinctions of wealth have been based on the elaboration of tomb design.

Multiple inhumations in rock cut tombs are still the dominant form of burial in the MBA (figure 3.6) (Albanese Procelli 2003b: 57). There is a general increase in size and elaboration from the previous period, however, and grave goods become more diverse and luxurious (van Wijngaarden 2002: 234). The elaborations include recessed entries, internal benches along the chamber walls, niches in the walls, and narrow corridors leading up to

the tomb entrances (Leighton 1999: 164). The latter are often referred to as *dromoi*, although they are usually too narrow to have been processional pathways (figure 3.7), as the *dromos* for an Aegean beehive tomb may have been. There is often a wider trapezoidal space immediately in front of the tomb entrance, however, which could have allowed a small number of people to perform ritual activities, as the findings of pottery in these

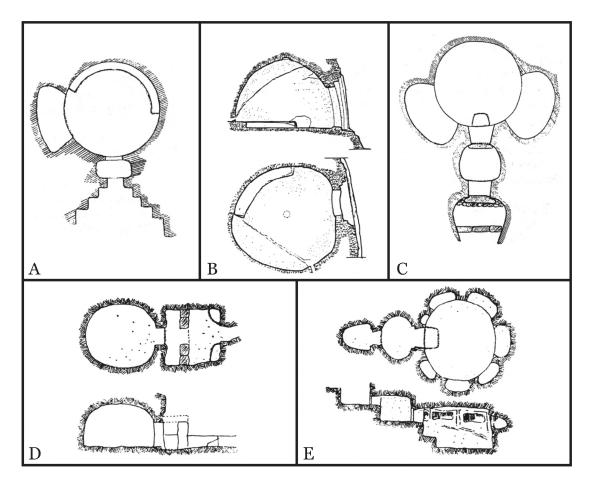


Figure 3.6: MBA tomb types. A: Molinello di Augusta (Siracusa), Tomb 1; B: Milena / Monte Campanella (Caltanissetta), Tomb B; C-E: Thapsos (Siracusa), tombs 32, 28, and unknown. (After Leighton 1999: 165, fig. 85, and Tusa 1999a: 480, fig. 8.)

spaces suggests (Leighton 1999: 167; Albanese Procelli 2003b: 60). The niches in the walls of the chamber contained other burials, and perhaps reflect a more formal treatment of earlier inhumations than what was standard in the EBA. Gold and silver are occasionally found in MBA tombs, as are personal ornaments of bronze (e.g. knives, razors, and mirrors). While a proper analysis of social status is somewhat hindered by differential preservation, widespread looting, and historical re-use, Leighton (1996b: 102-103) is likely correct in reading an existing social hierarchy in the discrepancy between larger tombs with rich assemblages and smaller chambers with fewer grave goods. Burials in jars without accompanying goods are still evident in the MBA, although as with the EBA they represent a minor practice. At Thapsos, a group of about twenty jar burials (nine of which

have been published) were found not far from a collection of rock-cut tombs (Albanese Procelli 2003b: 68-69). As there were no goods in the jars, their assignment to the MBA is conjectural, and they should perhaps reflect an 11th century BC re-occupation of the site by people with different burial customs (see 3.3.2).



Figure 3.7: Dromos in front of a rock-cut tomb at Thapsos.

A small number of MBA rock-cut tombs are more geometrically consistent than most contemporary examples (and all EBA tombs), and when coupled with a prominently arched roof, have been designated as *tholos* tombs. They have been argued to reflect the influence of Aegean contact (Militello 2004a: 322; Tomasello 1995-1996) as they resemble a class of rock-cut chamber tombs found in the Peloponnese and on the island of Cephalonia. They are discussed more fully in the following section (3.2).

In the LBA, certain necropolises (e.g. Pantalica, Caltagirone) become quite large. While rock-cut tombs are still a dominant practice, the introduction of new burials such as single inhumations in cist-like pits, so-called *fossa* (trench) graves, and the first urn cremation burials, indicate significant changes in both practice and ideology. The

cremation burials may indicate migration from mainland Italy: Leighton (1999: 195) compares them to Protovillanovan urnfields, and the earliest examples of this type of burial are found in the northeast of Sicily (i.e. the point closest to peninsular Italy and the Aeolian Islands). The rock-cut tombs in the cliff faces of the Pantalica cemetery are often simple oven-shaped chambers, but there are also some elaborate forms, including rectilinear groundplans with trapezoidal forecourts, and multiple-chambered tombs, where the niches of MBA tombs have developed into more separate spaces (figure 3.8) (Tusa 1999a: 571-72). Although LBA tombs do not contain Late Helladic pottery, other evidence for extrainsular contact can be seen in the presence of gold and silver jewellery, amber, glass, or faience beads, and non-Sicilian bronze forms (Tanasi 2004: 342-45).

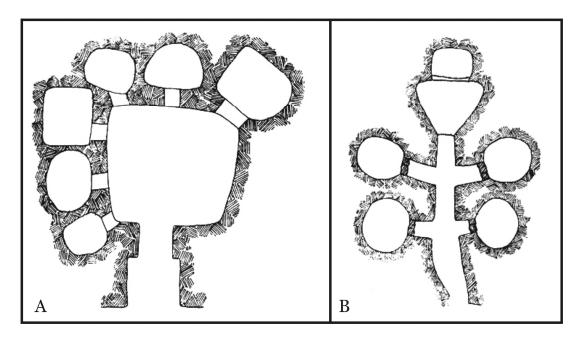


Figure 3.8: LBA multi-chambered tombs from Pantalica. A: Tomb 56 North; B: Tombs 12-16 North. (After Tusa 1999a: 571, fig. 11.)

Although not as rich in metallic ores as Sardinia or parts of the Italian mainland, Sicily still displays significant evidence for the production and consumption of bronze during the MBA and LBA. The one part of the island that did have ore resources (in the northeast, near Monti Peloritani) may have exploited surface veins during the Bronze Age (Giardino 1995: 307-308), and there is a noted increase of settlements in this region beginning in the LBA which may be related to increased exploitation of metals (Leighton 1999: 207). The sources of evidence for metallurgy include hoards, bronze grave goods, stone moulds, and foundry remains (Albanese Procelli 2000; Giardino 2000). While some evidence exists for eastern Mediterranean influence in the form of certain bronze objects, it is in closer connection with peninsular Italy that Sicilian metallurgy develops, especially in the LBA (Leighton 1985: 400; Giardino 1996: 130). The extensive spread of certain

common shapes – like Thapsos-Pertosa swords, shaft-hole axes, and serpentine fibulae – in both regions speak of prolonged, shared traditions in bronze manufacturing, perhaps precipitated upon the Sicilian acquisition of Italian ore (Giardino 1995: 326, 330; Leighton 1996b: 112). This connection, however, has also been interpreted as further evidence of the activity of eastern Mediterranean agents, where Aegean maritime traders are "important vehicle of contact" (Giardino 1995: 292).

Given that bronze forms in the Mediterranean seem to be particularly sensitive to outside influences, and that Sicily's reliance upon foreign copper indicates that participating in metallurgical activities meant necessarily participating in external networks of exchange, it is difficult (and perhaps inappropriate) to speak of a purely Sicilian style of metalwork during the Bronze Age. Still, there are a few forms which are likely Sicilian innovations given the strong distributional bias in favour of the island. These include: elbow and serpentine fibulas with straight pins; 'Pantalica' type razors; and flat trunnion axes (figure 3.9) (Giardino 2000: 103, table 6.1). The latter may actually indicate a material connection with the Iberian peninsula, where flat trunnion axes are also well represented, although the presence of stone moulds for these tools in Sicily indicates local production as well (Albanese Procelli 2000: 83).

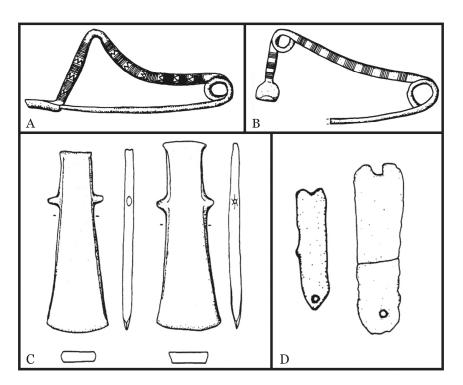


Figure 3.9: LBA Sicilian bronze forms. A-B: elbow and serpentine fibulae with straight pins from Mineo / Mulino della Badia (Catania); C: flat trunnion axes from Niscemi hoard (Caltanissetta); D: Pantalica-type razors from Pantalica (left) and Niscemi (right). (After Giardino 1995: 20, fig. 8B; 226, fig. 109D; 241 fig. 119B; 243, fig. 120C.)

When it comes to an analysis of how MBA and LBA communities were organised and functioned, there is no lively debate similar to the one that surrounds the social organisation and function of Nuragic sites in Sardinia (see section 4.1). This is no doubt partially due to the discrepancy of known sites on these islands: a handful of cursorilypublished settlements in Sicily compared with hundreds in Sardinia, making it much easier to categorise and compare Nuragic settlements than Sicilian ones. Because of the relative scarcity of settlement evidence in Sicily, discussions of social organisation tend to be characterised by: interpretations of burial evidence as reflections of social structures (Alberti 2006; Leighton 1999: 167-68; Albanese Procelli 2003b: 125-26); over-reliance (by necessity) on a few well-known settlements, especially Thapsos (Voza 1985: 550; Leighton 1999: 150-54; van Wijngaarden 2002: 236); diachronic investigations of levels of contact with extra-insular peoples (Bietti Sestieri 1988; Tanasi 2004); and discussions of when certain 'ethnic' groups can be discerned in the material record, usually framed within a model of migration or invasion from other parts of the Mediterranean (Bernabò Brea 1957: 169-70; La Rosa 1989; Tusa 1998a: 284-85; Albanese Procelli 2003b: 18). It is only selectively possible, therefore, to compare social organisation between Sicilian sites, such as common architectural responses, and it is often necessary to extend the analysis to nearby islands (e.g. the above mentioned ground plan similarities between Thapsos' northern habitation zone and I Faraglioni on Ustica).

While the burial evidence is certainly plentiful in Sicily, as a source of evidence for describing the organisation of communities it is somewhat limited. While it may offer a glimpse of how a society wishes to be remembered, it is only a partial glimpse: the selective strategy of representation for a community or sub-group thereof (Albanese Procelli 2003b: 122). The practice of multiple burials in single tombs is generally thought to reflect kinship ties (Leighton 1999: 167), which could perhaps be related to certain settlement features, such as the compounds noted at Thapsos and Ustica. Group burials also may suggest a system of inherited status (Leighton 1996b: 105). Albanese Procelli (2003b: 123) has suggested that particularly rich female burials in the LBA (such as those at Mulino della Badia in the interior of Catania) could suggest a process of matrilineal descent in some communities, though she cautions that this should not be confused with a matriarchal system of power.

As mentioned above, burial evidence has been used to argue for the existence of a social hierarchy in the MBA, although such ranking becomes obscured when looking at contemporary settlement plans. In the latter, no elite abodes are particularly obvious,

although admittedly power structures are not always reflected in architectural remains (Albanese Procelli 2003b: 35). Voza (1985: 559) has suggested that the radically new central complexes at Thapsos could be interpreted as elite residences, separate from the rest of the community, although the finds inside make this assignment uncertain, and he has also posited a more public function for them (Voza 1973b: 140; Doonan 2001: 179-80; and see section 3.3.3) The Anaktoron at Pantalica has been described as a "prince's palace" (Bernabò Brea 1957: 162-63; 1990: 35), yet this is surely too grandiose a term for a building with eight or nine rooms. It is also the only exposed structure at Pantalica, apart from the remains of a perimeter wall. It sits alone among the cliff face tombs, and it is uncertain, therefore, if it represents a personal residence, or should be interpreted as a ritual building of sorts connected to the necropolis. The presence of a foundry, sandstone moulds, and scrap metal in one of the rooms (Giardino 1996: 130) may suggest a more communal, industrial role (Leighton 1996b: 102).

Leighton (1996b) has theorised that MBA and LBA Sicilian communities reflect developing chiefdoms, with a turn back to a more egalitarian organisation in the Early Iron Age. In the MBA and LBA, the hierarchy implied by this developing chiefdom can be read from the unequal burials (tomb elaboration and grave goods), possible dwellings for elite rulers, a market for foreign, exotic objects, and a move towards craft specialisation (Leighton 1996b: 102, 105). There has also been the suggestion that the economies of this period were centralised and redistributive, although this is based more upon neoevolutionary requirements for a chiefdom than any specific evidence from Sicily (Albanese Procelli 2003b: 125; Leighton 1996b: 107). These chiefdom communities are often described as being 'proto-urban' (Militello 2004a: 304; Albanese Procelli 2003b: 36-37; Tusa 1999b: 176, 179). This label is usually left undefined, and seems dependent on categorising Thapsos (with its more regular compounds, complexes and paved 'street' system) as a MBA type-site (Voza 1985: 550), even though the complexes discovered there are unique in Sicily (van Wijngaarden 2002: 206). It also requires the assumption that large (but currently undiscovered) centralised communities are implied by the large eastern necropolises of Pantalica, Caltagirone and Dessueri (Leighton 1999: 150). A MBA/LBA proto-urban society also fits in with the general paradigm of eastern Mediterranean contact equalling social complexity (Leighton 1996b: 101). When such contacts fall off in the 1st millennium BC, a retreat to egalitarian villages (as opposed to early states) becomes inevitable. Beyond Thapsos, though, it is difficult to see any proto-urban features in Sicilian settlements. At best, the other Sicilian sites in the MBA and LBA resemble large villages. As for a connection between involvement in extra-insular exchange and the

development of social hierarchies, it is not clear from material evidence alone whether such contacts helped create elite members of Sicilian society, or whether elite membership was a pre-requisite to involvement in exchange networks. If the latter, the most a foreign connection could be said to do is entrench and legitimate existing social divisions.

3.2 Temporal Patterns of Connectivity and Range of Materials Involved

Although there is scattered evidence for contact with the eastern Mediterranean in the EBA (figure 3.10) at some centres in the central Mediterranean (especially the Aeolian Islands and Vivara), more regular communication with Sicily did not begin until the MBA (15th century BC). The Aeolian Islands in particular, an archipelago lying just to the north of Sicily's north eastern corner, seem to have had conspicuous access to Late Helladic pottery in the Capo Graziano and early Milazzese periods, as indicated by the amount of LH I – LH IIIA1 pottery recovered from the acropolis on Lipari. The excavations in the 1950s and 1960s (Bernabò Brea and Cavalier 1980) recovered over three hundred sherds of Aegean pottery at Lipari, most of it dating to this early period, although a lesser amount of LH pottery continued to arrive through the Ausonian II period (12th – 10th centuries BC) (Taylour 1980: 794-815), perhaps indicating that secondary systems of exchange were distributing such wares to these islands. Unlike the situation in eastern Sicily, however, and similar to the scenario encountered in southern Italy, Aegean pottery discovered in the Aeolian Islands has only been found in non-funerary contexts (Blake 2008: 12). Regardless

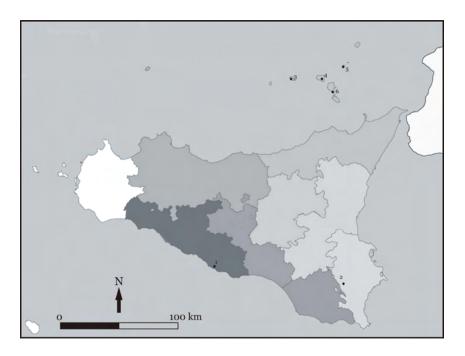


Figure 3.10: EBA sites in Sicily and the Aeolian Islands with imported material. 1. Monte Grande; 2. Monte Sallia (Castelluccio); 3. Filicudi; 4. Salina; 5. Panarea; 6. Lipari.

of the agents and mechanisms of exchange, therefore, it would appear that distinct local choices about what kind of pottery to use and how to use it dictated its consumption in the Aeolian Islands. All of the Aegean pottery from Lipari is assumed to be imported, although only local pottery has undergone petrographic analysis (Williams 1980; Williams and Levi 2008). Along with material from the eastern Mediterranean, Lipari maintained contacts with the more proximate Italian peninsula and Sicily in the EBA (van Wijngaarden 2002: 207), and has even yielded some Nuragic pottery in a late Ausonian II context (Ferrarese Ceruti 1998: 335), although some have maintained its presence on Lipari was due to Mycenaean intermediaries (Contu 1980: 836).

Aegean pottery is markedly rarer in Sicily than it is in southern Italy, which could suggest a drop-off associated with a down-the-line exchange pattern (Renfrew and Bahn 2008: 376; Militello 2005: 592), or, as Blake (2008: 16) has suggested, the more desirable imports had already been traded away by tramping eastern Mediterranean merchants on the (closer) peninsula, and the remaining goods were not as good in terms of quantity or quality. The only Aegean pottery in Sicily that predates the MBA is that found at the site of Monte Grande on the south coast – interpreted as a sanctuary associated with the production of sulphur by its excavator (Castellana 1999: 423) – during the LH I-II period (17th – 15th centuries BC). This is contemporary with the Aegean pottery found at Vivara, off the coast of Campania, and at Filicudi and Lipari in the Aeolian Islands (van Wijngaarden 2002: 204). The excavator at Monte Grande has also claimed that profuse amounts of Middle Helladic (18th century BC) unglazed plain and painted sherds have been found (Castellana 1999: 432-33; 2002: 52, 72-73; Vianello 2005: 135), although such an interpretation has been strongly questioned, with counter-claims suggesting these sherds should be dated considerably later (Leighton 2005: 277; Blake 2008: 4). It was once believed that a cup recovered from the Monte Sallia group of tombs at Castelluccio (Siracusa) was a Middle Helladic import (Taylour 1958: 55), although it has also been interpreted as a local product (Tusa 1999a: 351), and its simple geometric motifs are not distinct from the local vernacular (Leighton 1999: 141).

It is in the MBA (15th – 13th centuries BC) that an increase in imported pottery and other objects becomes more evident in Sicily (figure 3.11). Aegean LH IIIA2 imports (figure 3.12: A-C) (14th century BC) are well known in the Aeolian islands, on Sicily's east coast (Bietti Sestieri 1988: 27), and from four sites in Agrigento. The evidence from that province, however, is fairly scant: aside from Cannatello (see 3.4.1), the amount of Aegean

pottery is represented by only one to three sherds per site. Two tombs from Monte Campanella in Caltanissetta have also produced Aegean pottery, with two almost complete

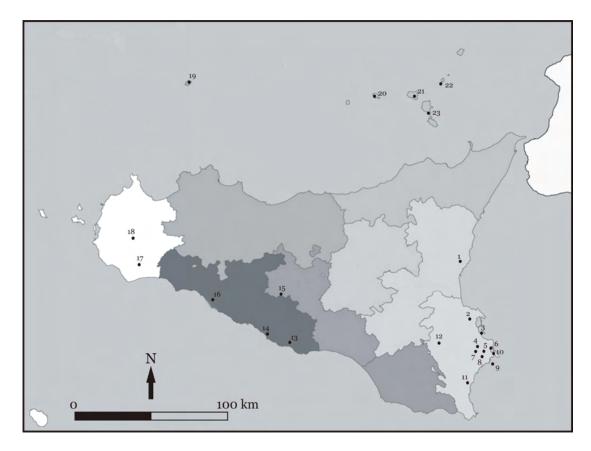


Figure 3.11: Sites in Sicily and surrounding islands with MBA imports. 1. Monte San Paolillo; 2. molinello di Augusta; 3. Thapsos; 4. Floridia; 5. Cozzo del Pantano; 6. Siracusa (Ortygia); 7. Grotta Chiusazza; 8. Milocca (Matrensa); 9. Ognina; 10. Plemmyrion; 11. Vendicari; 12. Buscemi; 13. Madre Chiesa; 14. Cannatello (Marina di Girgenti); 15. Milena; 16. Scrinda; 17. Erbe Bianche; 18. Mokarta; 19. Ustica (I Faraglioni); 20. Filicudi; 21. Salina; 22. Panarea (Punta Milazzese); 23. Lipari.

pots discovered (Vianello 2005: 133). One of these (a krater) is imported; the other (an amphora of probable 13th or 12th century BC date), is a local imitation (Jones and Levi 2004: 173). During the 14th century BC there is also evidence for contact between Sicily and Malta, particularly in the spread of Borg-in-Nadur pottery (figure 3.12: F) in southeastern and southern Sicily (Tanasi 2008). Eleven sites have reported Borg-in-Nadur facies pottery (15th – 12th centuries BC), most significantly at the cemetery of Cozzo del Pantano (Siracusa), where one tomb alone has yielded 22 sherds (Tanasi 2008; 40-47; Militello 2005: 589), at Thapsos (Siracusa, and see 3.3), where thirty-five sherds have been published, nineteen in the settlement and sixteen in the tombs (Tanasi 2008: 34-40), and at Cannatello (Agrigento), where a significant but as of yet unpublished amount of Borg-in-Nadur ware has been uncovered (Levi 2004: 234). In the Agrigento area, particularly at the site of Cannatello, a Cypriot appearance for some of the imported ware has been noted,

although Cypriot pottery is also known sporadically in eastern Sicily (figure 3.12: D-E) (De Miro 1999b: 448; Alberti 2008b). The MBA in Sicily is also noted for pottery connections with the Aeolian Islands, whose Milazzese pottery shares many forms with both the contemporary Thapsos facies on Sicily, and Proto-Apennine and Apennine pottery of the Italian mainland (Alberti 2008a: 55-68, tables 18-22).



Figure 3.12: Selection of MBA - LBA ceramic imports to Sicily. A-B: Aegean piriform jar and alabastron, Thapsos, Tomb D; C: Aegean piriform jar, Marina di Girgenti (Agrigento); D-E: Cypriot White Shaved juglet and Base Ring II jug, Thapsos, Tomb D; F: Maltese Borg-in-Nadur jug, Thapsos, Tomb D; G: Sardinian Nuragic askos, Pantalica, Tomb 81 South. (A-B, D-G after Marazzi and Tusa 2001: 165, 168, 169, 206; C after Castellana 2002: back cover).

In addition to actual imports, new Thapsos facies pottery shapes have been argued as betraying stylistic influences from Aegean pottery, albeit within local handmade and burnished-finish traditions (figure 3.13) (Tanasi 2005: 563). D'Agata (2000: 71-76) noted two local forms in the Thapsos repertoire which she felt reflected an Aegean influence: small jugs with narrow shoulder spouts (which she compared to a Late Helladic FS 160 'feeding bottle'), and two-handled deep bowls with raised bases (compared to the FS 284 deep bowl). To these Aegean derivative shapes Alberti (2004: 128-29) has added the small globular jug (which he compared to the FS 114 jug) and globular water jug (compared to the FS 87 squat jar with one vertical handle). He felt that D'Agata's comparison of the Sicilian deep bowl or cup to FS 284 was not appropriate formally or chronologically, and

preferred a comparison with the Furumark 80 deep rounded bowl with horizontal handle, which was present in tomb D at Thapsos (Alberti 2004: 132-33). He also argued that there were some shapes derived from specifically Cypriot pottery, like Base Ring I bowls, Proto Base Ring jugs, and Black Slip III jugs (Alberti 2005: 344-46). The few examples of incised figurative decoration on Sicilian pots (e.g. figure 3.13: C1) are also considered to be derivations of Aegean or Cypriot painted motifs (Alberti 2004: 133-34). As these MBA derivatives are definitely local products produced by Sicilian potters, they are not counted as imports in this study, although the specific influences they represent are considered in Chapter Five. A more detailed discussion of the Aegean derivative pottery found in the tombs at Thapsos is included in section 3.3.4 below.

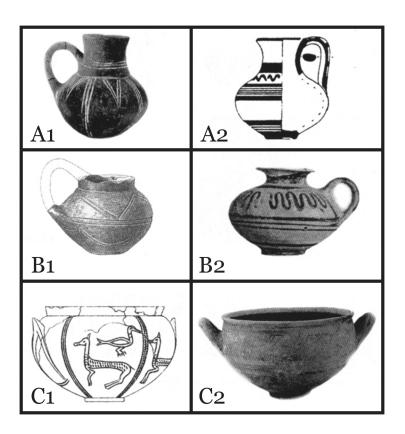


Figure 3.13: Possible Late Helladic ware shape influences in Thapsos facies pottery. A1: globular jug with cylindrical neck (Thapsos, Tomb D); A2: small globular jug FS 114 (Athens, Agora, Tomb 7); B1: globular water jug with vertical handle (Molinello di Augusta, Rubbish Pit 8); B2: squat jar with vertical handle FS 87 (Mycenae); C1: globular cup with shallow collar and ringed base (Thapsos, Tomb A1); C2: deep rounded bowl with horizontal handles FM 80 (Thapsos, Tomb D). (After Alberti 2004: plate IX: 6-11.)

Aside from vessels, a few clay figurines have been interpreted as displaying Aegean affinities, including a miniature chair and two tables from the tombs at Thapsos (figure 3.14: A) (Orsi 1895: 107, 129). Aegean-style anthropomorphic figurines are rare, though. Taylour (1958: 69) mentions two from the museum in Palermo that he considered to be "obvious Mycenaean imitations," and which have been more recently labelled as

Eneolithic figures (Marazzi and Tusa 2001: 69). Two anthropomorphic figures and one zoomorphic figure were found in Tomb 1 at Thapsos (Orsi 1895: 95-96), although they are not particularly close to Aegean examples (figure 3.14: B, C). Still, it should be acknowledged that such objects are not traditional Sicilian features. Leighton (1999: 141-42, fig. 69: 1-3) notes the exceptional case of twenty-two EBA figurines from Monte San Giuliano (Caltanissetta), but these flatter representations do not resemble the Thapsos figures either.

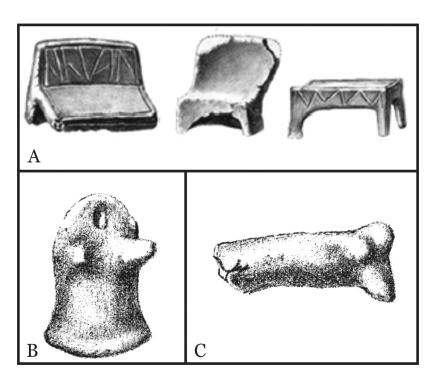


Figure 3.14: Clay figurines. A: Furniture models, Thapsos, Tombs 14, 56; B-C: anthropomorphic and zoomorphic figures, Thapsos, Tomb 1. (After Tanasi 2008: 106, fig. 3: I; Orsi 1895: plate IV: 4-5.)

Beyond ceramics, there is only a small amount of imported material found in MBA levels in Sicily. Amber 'spacer beads' have been reported from a tomb in Plemmyrion (Siracusa) (Tusa 1999a: 490-91), one amber bead from a MBA hut in Monte San Paolillo (Catania) (Tanasi forthcoming), and five beads in two tombs in Thapsos (Orsi 1895: 134; Voza 1973a: 40). Glass or glass paste beads were also found in three tombs at Thapsos, as well as gold jewellery (one tomb), semiprecious stones (two tombs), and a boar's tooth. Amber is often presented as reflecting a connection to the Aegean, although it cannot actually be sourced to the Aegean. The Baltic region is the most likely origin for most of the amber found in Sicily, and if such material entered the Mediterranean via the Adriatic Sea (Negroni Catacchio 1989: 660), as the common distribution of amber in the western Peloponnese suggests (Harding 1984: 74, 79-80), then there is no geographic necessity for these beads to have been acquired directly from Aegean traders. It is possible that central

Mediterranean agents acted as middle-men in the spread of amber from the Baltic to the Aegean (Cline 1994: 78). Four amber beads were found in tomb D at Thapsos (Voza 1973a: 40), which also contained gold jewellery, glass beads, and semiprecious stones. Together, this might indicate trade with the eastern Mediterranean, where these kinds of materials circulated with greater frequency. As this is a multiple inhumation tomb with forty-nine burials, however, there is no need for any of these items to have been imported together in one cargo, and they could reflect multiple origins. Glass, glass paste, and faience are often thought to reflect eastern Mediterranean or Near Eastern products, although Harding's (1984: 103) study of such objects in central European contexts concluded that local manufacture was more likely. Such beads found in a trading centre like Thapsos are still more likely to be imports, but would need closer scientific analysis to determine their origin.

Some finished bronze objects from MBA contexts are thought to represent either imports or foreign influences in Sicily. Four bronze spear or lance heads were found during 19th century AD investigations in the Cannatello area (Rizzo and Orsi 1897: 117-18), which may be Aegean but are well known all over the Mediterranean (Taylour 1958: 77). Both Cannatello and Thapsos have produced a copper oxhide ingot fragment, which could

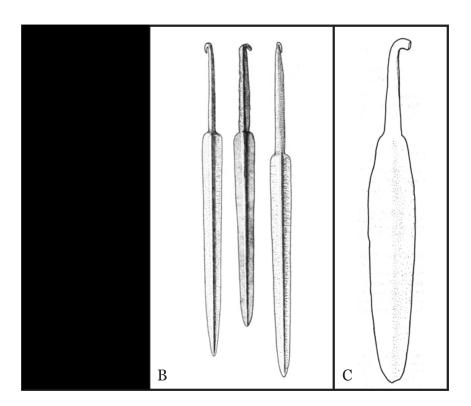


Figure 3.15: Thapsos Tomb D dagger (A) vs Cypriot (B) and Sardinian (C) rat-tail tanged weapons. (After Marazzi and Tusa 2001: 172; Catling 1964: fig. 12; Lo Schiavo *et al.* 1985: 10, fig. 3.)

represent exchange with eastern Mediterranean merchants, or perhaps a connection to Sardinia, which was more involved in the circulation of these objects (Giardino 1995: 293). Cannatello has also provided evidence of Sardinian contact in the form of Nuragic pottery (Levi 2004: 237). At Thapsos, a bronze rod with animal figures (figure 3.39) found in the Capanna Calvo building (not far from the findspot of the oxhide ingot fragment) (Voza 1973a: 52) could also be interpreted as a possible Sardinian import (Giardino 1995: 34). Two daggers from tombs 37 and 41 at Thapsos were thought to resemble both Aegean and Italian examples by Orsi (1895: 122, 125), and a third (from tomb D) is described as a Thapsos-Pertosa dagger, inspired by the Cypriot rat-tail tanged variety (Vianello 2005: 164). This assignment seems overly generous, however, as the defining feature (i.e., the rat-tail tang) is not present (figure 3.15). The base of the Thapsos dagger seems more triangular, like the standard, local Thapsos-Pertosa variety (Harding 1984: 250). There were two short, square iron rods found in tomb 48 at Thapsos (Orsi 1895: 127), whose origin Orsi was unable to determine. They are unlikely to be local products in the MBA.

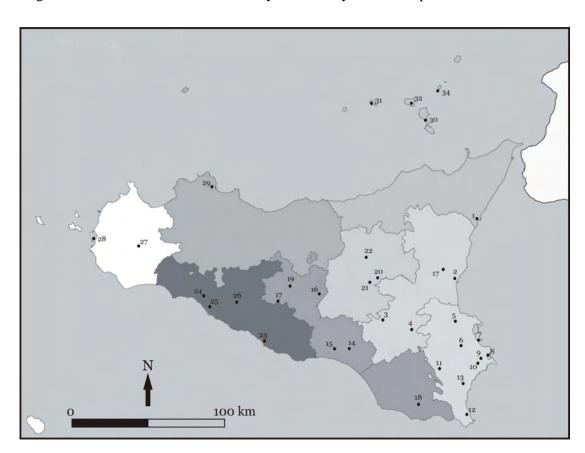


Figure 3.16: Distribution of LBA - EIA imported material in Sicily and surrounding islands. 1. Taormina; 2. Catania; 3. Caltagirone; 4. Mineo (Mulino della Badia); 5. Lentini (Metapiccola); 6. Pantalica; 7. Thapsos (Priolò); 8. Siracusa; 9. Cozzo del Pantano; 10. Cassibile; 11. Plemmyrion; 12. Grotta di Calafarnia; 13. Noto Antica; 14. Niscemi; 15. Dessueri (Monte Canalotti); 16. Sabucina; 17. Milena (Caldare, Monte Campanella); 18. Modica; 19. Polizzello; 20. Morgantina Cittadella; 21. Piazza Armerina; 22. Enna; 23. Cannatello (Agrigento); 24. Contrada Anguilla di Ribera; 25. Scrinda; 26. Sant'Angelo Muxaro (Capreria); 27. Monte

Finistrelle di Gibellina; 28. Motya; 29. Palermo; 30. Lipari; 31. Filicudi; 32. Salina; 33. Panarea (Punta Milazzese).

During the LBA in Sicily (mid-13th – 10th centuries BC) (figure 3.16), a dramatic drop-off in Aegean materials is noted in Sicily (Leighton 1999: 187; Blake 2008: 5). Thapsos may have been unoccupied from about the middle of the 13th century BC (Alberti 2007: 373; see section 3.3.2), while there appears to have been continuous contact at Cannatello for at least another 50 years (Castellana 2002: 131). It has been suggested thatchanges in the relationship between southern Italy and the Aeolian Islands, which enters its Ausonian phase around 1270 BC, may have disrupted contacts, or at least the flow of Aegean materials, to the east coast during the latter half of the 13th century BC (Militello 2005: 593). The Ausonian assemblages on the Aeolian Islands show a decided peninsular influence, possibly related to the movement of Italic mainland peoples to the archipelago, and much less evidence for contact or influence with Sicily itself (Leighton 1999: 149; Albanese Procelli 2003b: 105). Contact between the Aegean and southern Italy did not cease at this time, although much of the Aegean-looking pottery in Italy during the 13th century BC was locally manufactured (Jones *et al.* 2005: 541).

Only two sites, Capreria (Agrigento) and Pantalica (Siracusa) have evidence for eastern Mediterranean-looking pottery in the LBA. The former has produced a Cypriot LC IIIA cup in reddish-yellow clay from a tomb (Castellana 2002: 134; Vianello 2005: 157). The Pantalica example, a whole jug from tomb 133 (north-west necropolis), is now considered to be a local imitation (Leighton 1996b: 115). As mentioned in the material overview, Tanasi (2004: 338) has recognised continued Aegean influence in certain shapes of the Pantalica North facies (figure 3.17), which he felt indicated prolonged contact with the Aegean, albeit in the absence of imported Aegean pottery at this time. Central Mediterranean ceramic imports are more plentiful than eastern Mediterranean pottery in the LBA: two sites have yielded Maltese pottery, two sites Aeolian or peninsular Italian pottery, and three sites Sardinian pottery. The Maltese pottery (either late Borg-in-Nadur or Bahrija facies) comes from Grotta di Calafarnia, a cave site in Siracusa (Tanasi 2008: 29), and from (a possibly resettled) Thapsos, where it is found in context with Cassibile (Pantalica III) facies plumed-ware pottery in the central habitation zone (Militello 2004a: 317; Voza 1973b: 154). A multi-chambered kernos vessel found inside a hut at Metapiccola near Lentini (Siracusa) (Albanese Procelli 2003b: 51) is reminiscent of similar pots from Lipari of 11th – 10th centuries BC (Ausonian II) date (Leighton 1999: 191, fig. 99: 8). An unspecified amount of pottery found in hut 11 at Scrinda (Agrigento) has been compared to both Late Apennine peninsular and Ausonian II capeduncole ware (Spatafora

2001: 147; Bernabò Brea *et al.* 1994: 36). Albanese Procelli (2003b: 47) felt this indicated contacts between Scrinda and eastern Sicily, which had been absorbing peninsular influences from the beginning of the LBA.

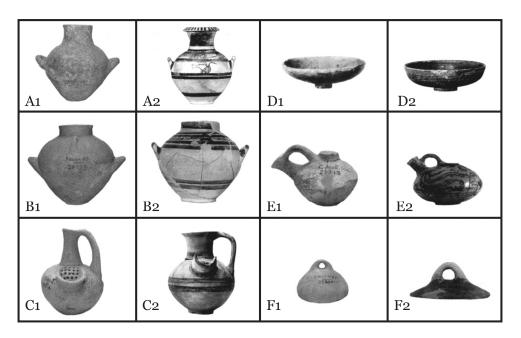


Figure 3.17: Comparison of Pantalica North vs Aegean pottery shapes. A1-2: Pantalica North amphora and Aegean amphora FS 58; B1-2: Pantalica North hydra and Aegean hydra FS 64; C1-2: Pantalica North strainer jug and Aegean strainer jug FS 155; D1-D2: Pantalica North plate and Aegean plate FS 208; E1-E2: Pantalica North askos and Aegean askos FS 195; F1-2: Pantalica North cover and Aegean cover FS 335. (After Tanasi 2004: 362, fig. 4.)

Most of the evidence for extra-insular contact in the LBA comes from tombs: personal items in bronze and other metals, glass and amber beads, and small amounts of ivory. While the identification of many of these items as imports may be reasonably secure, based on either their scarcity in Sicily or the exotic nature of their raw materials, any specific source is often only assumed. For example, gold rings (figure 3.18) are



Figure 3.18: Gold rings found in Sicily. A, C: Montagna di Caltagirone (Catania) spiral and eye motifs; B: Monte Dessueri, Monte Canalotti necropolis (Caltanissetta) plain almond-shaped bezel; D: Pantalica South necropolis (Siracusa) eye motif. (After Tanasi 2006: plates IX, XII; Panvini 2001: 501, fig. 21; Marazzi and Tusa 2001: 195.)

commonly interpreted as evidence for continued contact with the eastern Mediterranean (Militello 1991: 19-20), and have been found at five LBA burial sites: Montagna di Caltagirone (Catania) (Tanasi 2006: 104-105); Dessueri and Milena (Caltanissetta) (Panvini 2001: 501; Militello 1991); Contrada Anguilla di Ribera (Agrigento) (Panvini 1986: 114); and Pantalica (Siracusa) (Marazzi and Tusa 2001: 195). The rings take different forms: plain bands; eye motifs; interlocking spirals; a fish; an undecorated, almond-shaped bezel; and a serpentine ring. While gold jewellery is not likely a local product on Sicily, there are only "generic parallels" to the eastern Mediterranean (Leighton 1999: 178), so any prolonged Aegean contact in the LBA is not specifically supported by this evidence. Cultraro (2005: 104), in fact, believes that investigations of gold production and consumption in Sicily should consider the cultural complexes of southwest Spain and the Balearic Islands as potential sources of both technological transfers, and raw materials. In a similar vein, beads made of various materials like amber, ivory, glass paste, or bone may indeed be evidence for extra-insular trade, but, as mentioned above with regards to the MBA instances of these materials, the identity of the trade partner is obscure, and such objects may pass through many hands both before and after reaching Sicilian shores. Only a very few exotic objects have more certain proveniences in LBA Sicilian contexts, such as the Egyptian steatite scarab found in a poorly preserved building near Monte Finestrelle di Gibellina (Trapani) (De Cesare and Gargini 1997: 372). How many separate exchanges are represented by such an object in Sicily, however, is difficult to assess.



Figure 3.19: Bronze bowls from Capreria (Agrigento) (top), and Enkomi, Cyprus (bottom). (After Castellana 2002: 135, fig. 61; Catling 1964: fig. 17: 10.)

Bronze imports from the eastern Mediterranean to LBA Sicily are not abundant. Possible Cypriot objects include two bronze bowls found at Capreria (figure 3.19, top), in the same tomb as the LC IIIA cup (Castellana 2002: 134; Vianello 2005: 157), two more found in a tomb at Caldare (Caltanissetta), and one from Monte Campanella, in the same tomb as the locally made Aegean-looking amphora (Vianello 2005: 133). There is some uncertainty, however, over the assignment of a Cypriot provenience for some of these bronze bowls. Bernabò Brea (1957: 132) felt the Caldare bowls were Mycenaean imports, while Taylour (1958: 76) felt the basic hemispherical shape of one of them "could have been produced anywhere". The other Caldare bowl, one of the examples from Capreria, and the Monte Campanella bowl, however, all have vertical handles and smaller, stepped bases, which do have a certain formal resemblance to 'laver' bowls found at Enkomi (figure 3.19, bottom). Bronze mirrors from Pantalica, found in four tombs from the north, north-west, and south-west necropolises, have been compared to both Aegean and Cypriot prototypes (Leighton 1999: 178). They come in three varieties: lacking a tang, but with rivet holes; with a long narrow tang; and with a short, wider tang (Lo Schiavo et al. 1985: 28-29). Also from Pantalica, a bird-headed handled dagger (Tomb 68 North) and knife (Tomb 8 North), both with ivory handles, have been compared to a knife found in a tomb in Perati (east coast of Attica) (Tanasi 2004: 342) (figure 3.20). The actual similarity is not



Figure 3.20: Knives and daggers with bird-headed handles. A: Perati, Greece; B: Pantalica, Tomb 8 North; C: Pantalica, Tomb 68 North; D: Wackonig; E: Hungary. (After Bouzek 1985: 149, fig. 74; Tanasi 2004: 363, fig. 5: A.)

that striking (Harding 1975: 199): the Perati example has an in-turned head with the 'bill' also attached to the handle, while the Pantalica weapons both have heads that look away from the blade. A closer parallel seems to be with examples from Wackonig (southern Austria), and Hungary (Bouzek 1985: 149, fig. 74: 5-6), although none of these comparanda have handles made of ivory. Violin-bow fibulae, such as those found in tombs at Pantalica and Cozzo del Pantano (Siracusa), may be imported from the Aegean (Tanasi 2004: 343), although mainland Italy is also interpreted as possible source for these objects, if not a wider Mediterranean *koine* (Bietti Sestieri 2001: 484; Leighton 1999: 178; Tusa 1999a: 575).

Finished bronze objects in LBA Sicily seem to indicate more communication and exchange with the central and western Mediterranean, than the Aegean or Cyprus. For example, Giardino (1995: 200-205) notes a certain type of flat trunnion axe (a flat axe with projecting lateral points), which appears in 10 LBA Sicilian contexts. While he credits an original Aegean source for this shape, this is only supported by seven examples, many with uncertain dates (Harding 1975: 184-86). Bouzek (1985: 151) claimed such axes originated in the Near East and Anatolia. Much more striking on the distribution map (figure 3.21),

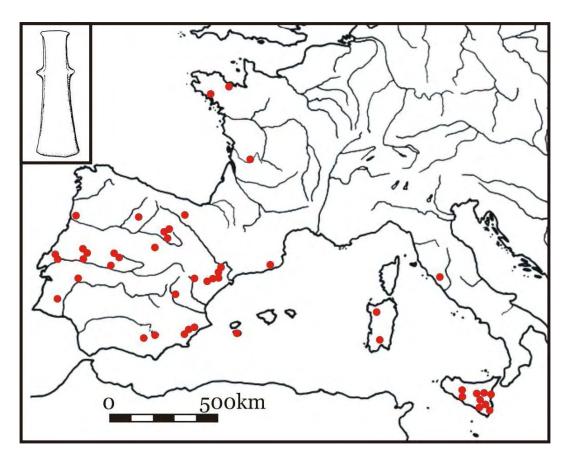


Figure 3.21: Distribution of flat trunnion axes in the central and western Mediterranean. (After Giardino 1995: 204, fig. 95.)

however, are the twenty-nine examples from the Iberian Peninsula (and a further three from intermediary Sardinia and Formentera) which would seem to indicate that it was communication and exchange between the western and central Mediterranean that influenced the development of this axe (Giardino 1995: 204, fig. 95; Cultraro 2005: 104). There are also bronze forms from six sites that represent Sardinian imports or influences, including double axes from Catania and Taormina (Giardino 1995: 293), two Nuragic bronzetti figures (Rowland 1987; Lilliu 1945: 41), a flanged axe with raised bands (Giardino 1992: 307) also known from earlier, albeit fewer Italian contexts (Carancini 1982: 158), and lastly the above mentioned bronze rod with animal figures from Thapsos (Bernabò Brea 1970: 144). This last object is unfortunately the only one of these possible Sardinian imports for which we have an archaeological context (see 3.3.3).

As mentioned in the material overview section, Sicilian metallurgy shared many forms with peninsular Italian metal working in the LBA (Leighton 1999: 207). This shared tradition is not particularly evident in the database, where only one site – Sabucina (Caltanissetta), which yielded fragments of casting moulds for an Italian-type sword (Albanese Procelli 1996: 122, 128) – is described as a potential Italian import (in this case, an imported technology). The problem is uncertainty: many Sicilian bronze forms are so similar to Italian ones, and at the same time as plentiful, that it is impossible to distinguish between imports and local productions. For example, Giardino (1995: 245) notes the difficulty in determining the origin of the serpentine fibula with curved pin, which appears in over one hundred mainland contexts, and numerous Sicilian ones. These fibulae are too formally similar to distinguish a Sicilian variety from a peninsular Italian one, and as a result certain instances of these objects in Sicilian contexts may be Italian imports (and vice-versa), but are indistinguishable from local products. This is also the case for the shaft-hole axe (Giardino 2000: 103). It is perhaps not strictly necessary in these cases to be able to distinguish either imports from local products, or to determine whether the origin for any particular form was in Sicily or the mainland. The common forms themselves indicate a close connection between these regions during the LBA.

By the end of the LBA and beginning of the Iron Age, new connections can be detected in bronze forms shared between Sicily and the Atlantic coast of Spain, Portugal, and France (Giardino 2000: 104), and even as far away as England, Ireland, and Scotland, albeit in only a few cases, such as palstaves with lozenge-shaped profiles (Giardino 1995: 324). More recently there has been a proposal that a bronze implement found in the English Channel was a Sicilian plough shoe (Needham and Giardino 2008: 61-62), adding

to the growing corpus of materials that indicate overlapping bronze networks from the central Mediterranean to the Atlantic.

Beyond movable objects, foreign influence, and at times presence, has been interpreted in certain architectural remains in MBA and LBA Sicily. As mentioned in the overview of Sicilian materials, this involves both funerary structures (so-called tholos tombs), and in two instances (Thapsos' central habitation complexes and the Anaktoron at Pantalica) presumed dwellings. The *tholos* tombs (figure 3.22) are defined as having circular or sub-circular plans, arched or pointed ceilings with or without indents, benches along the walls, occasionally corbelled masonry around the entrances, and often dromostype paths leading up to the forecourts (Leighton 1999: 168). There are no standardised plans, although this also matches Aegean rock-cut chamber tombs, which have substantial varieties in form (Tomasello 2004: 189). Although Sicilian scholars commonly refer to both rock-cut chamber tombs in Sicily and the Aegean as tholos tombs, this should not be confused with the better known subterranean, stone-built tholos tombs – also called 'beehive' tombs – which are significantly different in scale, labour investment, construction technique, chronology, and practices involved (Dickinson 1994: 222-27). The use of a regular unit of measure and some geometric refinements are held as further proof of the Aegean influence in such tombs, and certain scholars have posited the presence of foreign architects (Tomasello 1995-1996: 258; Militello 2004a: 322, 325). While many of these features have EBA Sicilian precedents, their convergence has been argued to represent a closer contact with the Aegean world, where there was not only an economic, but also an ideological exchange during the MBA (Leighton 1999: 168).



Figure 3.22: Rock-cut 'tholos' chamber tombs from Sicily and the Aegean. A-B: Molinello di Augusta (Siracusa), tombs 1893.4 and 1893.2, plan and section; C: Volimidia (western Peloponnese), Tomb 6 South, plan and section; D: Parisata (Cephalonia), tomb, plan and section. (After Tomasello 1995-1996: 162, fig. 92; 207, fig. 119; 214, fig. 124.)

Others have dismissed any connection to Aegean tomb construction and practice. The rock-cut tomb (of any shape) has been a longer established feature of central Mediterranean funerary customs than any place in the eastern Mediterranean, with the earliest examples coming from southern Italy and Malta (Whitehouse 1972: 275). Domeroofed chambers are known as early as the Neolithic period in Italy, and become standard in the following Copper Age (Whitehouse 1972: 276). In Sardinia, Late Neolithic rock cut tombs (called *domus de janas* – 'fairy houses') are very common features, with over twenty-five hundred examples known (Webster 1996: 49). In Sicily itself, the EBA Castelluccio rock-cut tombs have been characterised as axial and symmetrical (Maniscalco McConnell 1996: 86), perhaps even incorporating a "rudimentary unit of measure" (McConnell 1992: 35). Rather than the imitation of some eastern form, Albanese Procelli (2003b: 57) has suggested that *tholos* tombs actually re-create typical Sicilian homes, where the change from circular to square tombs echoes the change in domestic structures in the LBA/EIA. With regards to the tholos style tombs specifically, the presence of a central cavity in the roof could be seen as either a representation of an *opaion* opening, which in huts would allow for the ventilation of hearth smoke, or simply a crown-like projection that the huts may have had, if we accept the representation of such superstructures seen in later miniature hut representations (figure 3.23) (Albanese Procelli 2003b: 57).

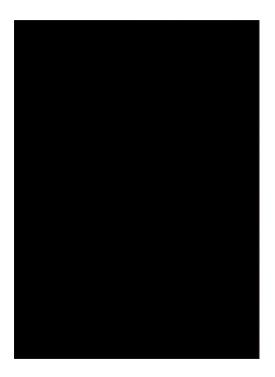


Figure 3.23: A 7th – 6th centuries BC model hut from shrine at Polizzello (Caltanissetta). (After Marazzi and Tusa 2001: 225.)

Whether we accept any Aegean influence in these tombs or not, their distribution indicates they were not the dominant style of rock-cut tomb in either MBA Sicily or LBA Greece. In fact, the number of examples provided in each area actually favours a Sicilian origin. Tomasello (1995-1996: Appendix I) listed thirty-eight examples of Sicilian tholos tomb, with only twenty-nine instances of this tomb type on the Greek mainland and in Cephalonia (Tomasello 1995-1996: Appendix II). To these totals we can now add the more recent discoveries of three tholos tombs near Milena (Caltanissetta) (Tomasello 2001), and twenty-seven tholos tombs in Ragusa (Militello 2004b; Rizzone et al. 2004), bringing the Sicilian total up to sixty-eight, more than double the Aegean amount. This leads to an interpretive paradox: the more Sicilian tholoi are found, the more it suggests a deeper, penetrative Mycenaean influence in MBA Sicilian society for certain scholars (e.g. Militello 2004b: 294), instead of a more straightforward interpretation that we are in fact dealing with a widespread Sicilian practice, which developed over centuries of constructing rock-cut tombs, and eventually led to geometric refinements and more consistent execution. What still might be considered evidence of foreign-inspired practice are the cist-like trenches containing four burials found in Tomb 29 at Thapsos (Orsi 1895: 116), which is a practice known in the Aegean, but is not a typical Sicilian MBA practice (Taylour 1958: 69).

Perhaps a more fruitful area for discussing foreign architectural influences can be seen in the non-burial structures of the Anaktoron at Pantalica, and the central habitation zone complexes (A, B, and C) at Thapsos (figures 3.24 and 3.32). These constructions are more rigidly rectilinear than earlier or contemporary Sicilian settlement buildings, and involve sequences of rooms arranged axially. The rooms of the Thapsos complexes also frame unroofed courts. Much of the discussion of these buildings has involved assessments of the amount of influence provided by eastern Mediterranean peoples (e.g. the possible presence of Aegean or Cypriot architects – Militello 2005: 589; Tomasello 2004), rather than whether any influence is strictly necessary. While Tomasello (2004: 206-208) noted that foreign input was needed only for the planning of the Thapsos complexes, since the execution seems to have followed traditional Sicilian construction methods (c.f. Militello 2004a: 318, and section 3.3.3), he felt that the advanced masonry techniques used in the Anaktoron at Pantalica (figure 3.24) required both an Aegean architect and Aegean labour.

It has been suggested that the Anaktoron is actually an early Medieval structure (Messina 1993: 61; Leighton 1999: 157), and therefore any advanced technology interpreted is a by-product of the building not belonging to the Bronze Age. The

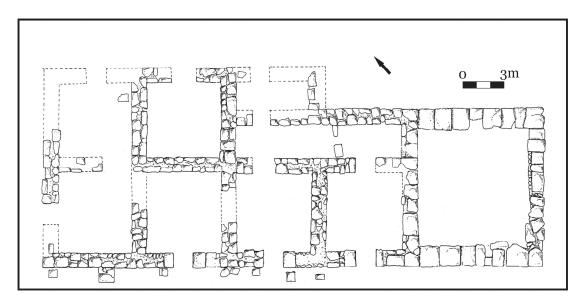


Figure 3.24: The Anaktoron at Pantalica (Siracusa), plan. (After Bernabò Brea 1990: 74, fig. 7.)

While the question of specific foreign influence is somewhat obscure (see 3.3.3 below), Doonan (2001: 161) is correct in emphasising that foreign ideas should not be interpreted as "a passive process of absorbing outside ideas." Instead, he stressed the importance of developing social competition within communities as a result of material or physical contact with outsiders, which led to the formalisation of settlement spaces. Given that local labour is believed to have been used for the Thapsos complexes, the question of whether a professional Aegean or Cypriot architect was strictly necessary should still be an open question. These complexes, although certainly representing an original plan for MBA Sicily, are not especially complicated, particularly when placed alongside of the plans of the Mycenaean citadels and Cypriot urban centres to which they are commonly compared (figure 3.25). If the local population of Thapsos was exposed to ideas about the organisation of space provided by maritime merchants, not just from the eastern Mediterranean but the Aeolian Islands and southern Italy as well (Vianello 2005: 93), or

were themselves aware of other types of complex urban planning via their own travels, it does not seem inconceivable for the complexes at Thapsos to have been built *and* planned by locals.



Figure 3.25: Architectural comparanda to Thapsos complexes. A: Pyla Kokkinokremmos (Cyprus), complexes A-C; B: Maa Palaeokastro (Cyprus), Building II; C: Pylos (southwest Peloponnese), central Palace area with megaron. (After Tomasello 2004: 204, figs. 14, 16; Dickinson 1994: 156, fig. 5.31.)

Now that a general picture of Sicilian MBA and LBA materials has been given, and a survey of the foreign objects and influences has been presented, a closer examination of specific instances of cultural encounters follows, starting with the key coastal centre of Thapsos. The focus then shifts the centre and west of the island, to analyse both Cannatello and the region as a whole.

3.3 Thapsos

3.3.1 Overview

Thapsos has been the site of human activity from at least the Early Bronze Age, although it is not until the MBA that it becomes the 'name' site for eastern Sicily, based on the materials found in its tombs (van Wijngaarden 2002: 229). Much has been made of the eastern Mediterranean materials found at Thapsos, and the site is certainly well positioned to exploit connections with maritime traders coming from the east. It is located on the



Figure 3.26: South-eastern Sicily, showing the location of Thapsos in relation to other MBA and LBA sites. (After Bernabò Brea 1990: 42, fig. 4.)

Magnisi Peninsula on Sicily's east coast (figure 3.26), in the middle of a large gulf framed by the Augusta peninsula to the north and Siracusa to the south (Tusa 1999a: 471) (figure 3.27). Thapsos would have provided decent anchorages in its two natural harbours, found on the north and south leeward coasts (Vianello 2005: 164) (figure 3.28).



Figure 3.27: Location of Thapsos in the Gulf of Augusta, showing the coastal terrain. Inset: location on Sicily's east coast.

As such, the site has been posited as an emporium and, according to a few scholars, founded or controlled by foreigners (Holloway 1981: 86-87; Kilian 1983: 93; Bietti Sestieri 1988: 40).



Figure 3.28: Satellite image of the peninsula of Thapsos looking west, showing its two natural harbours.

The site has two principal quarters: the first comprised of three settlement zones; and the second of three, less cohesive groupings of rock-cut tombs (figure 3.29). The residential quarters at Thapsos, covering an area of about 1000 x 300m, are found to the east of the isthmus, on the western side of the peninsula. They have been divided into: the central habitation zone (involving rectilinear complexes), the northern settlement zone (with its compound-style of organisation) (Albanese Procelli 2003b: 37), and just to the

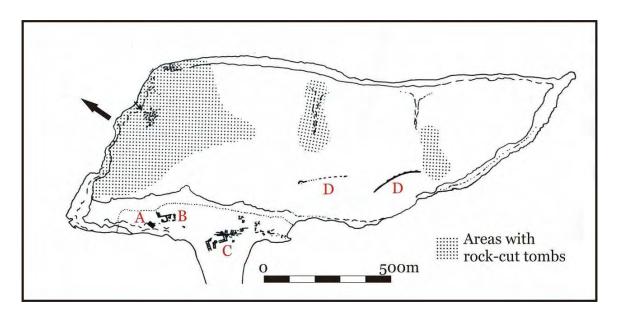


Figure 3.29: Thapsos, overall groundplan. A: Capanna Calvo building; B: northern settlement zone; C: central habitation area; D: remains of 'fortification' walls. (After Castellana 2002: 140, fig. 63.)

northwest of this area, a separate building called Capanna Calvo (Bernabò Brea 1970: 142). These built-up areas are well positioned to exploit the two harbours. The more exposed promontory contains about three hundred MBA rock-cut chamber tombs. Excavations in the 19th century AD focussed on these tombs, while investigations in the 1960s and 1970s largely concentrated on the settlement areas near the isthmus (Voza 1973b; van Wijngaarden 2002: 229, n. 1).

Just as Thapsos facies pottery has been used to date other stratigraphic sequences in Sicily, particularly on the east coast, Thapsos itself has been held up as a type site for both Middle and Late Bronze Age settlements in Sicily, and for the types of extra-insular contact Sicily had (D'Agata 2000: 62; Malone et al. 1992: 174). As van Wijngaarden (2002: 206) has argued, however, Thapsos is not typical of the kind of settlements that have been found in any part of the island, particularly its 2nd and 3rd occupational phases (Vianello 2005: 164), and its idiosyncratic architecture is more commonly compared to extra-insular examples (Tusa 1999a: 477; Doonan 2001: 179). Thapsos is also unusual in that eastern Mediterranean pottery has been found in both funerary and domestic contexts, going against a general eastern Sicilian trend of such wares being restricted to funerary contexts. The residential sherds have not been published, however, so nothing can be said of their amount, form or specific context (Militello 2004a: 306, n. 44). More recently, there have also been discussions regarding the presence of Maltese pottery in both the tombs and the settlements (Tanasi 2008: 34-47; Leighton 1999: 191; Blakolmer 2005: 658-59). This pottery is actually more abundant in the habitation area than Aegean or Cypriot wares (van Wijngaarden 2002: 235; Tanasi 2008: 38-40).

In addition to actual imported pottery, there is evidence of locally made 'Aegean-derivative pottery,' involving certain Aegean or Cypriot "formal elements" being incorporated into pottery that is handmade in the local tradition (D'Agata 2000: 64; Tanasi 2005: 563-64). These foreign or foreign-inspired wares, however, represent only a small part of the ceramic assemblage at Thapsos, both in the tombs and in the settlement (van Wijngaarden 2002: 230). Beyond ceramics, certain metal objects are thought to have been imported, including a bronze cup and bronze weapons (Vianello 2005: 164; Militello 2004a: 309), iron rods (Orsi 1895: 127) and an oxhide ingot fragment (Giardino 1995: 31). Amber, gold, and glass beads (all from the tombs) round out the category of probable extra-insular objects found at the site (Alberti 2006: 381, table 2).

3.3.2 Chronology

Chronologically, the tombs have been dated based on the presence of Aegean pottery. The northern and central habitation areas have been divided into three phases of occupation by Voza, based not so much on stratigraphic excavation, but rather on architectural styles, the spatial relationship of certain structures to each other, and occasionally, by local pottery that can be compared to similar forms in the tombs, and then assigned a date based on its association with Aegean pottery (Voza 1973b: 140). As the tombs follow the typical MBA Sicilian practice of having multiple burials, though, the chronological association between local and Aegean shapes may not be particularly tight.

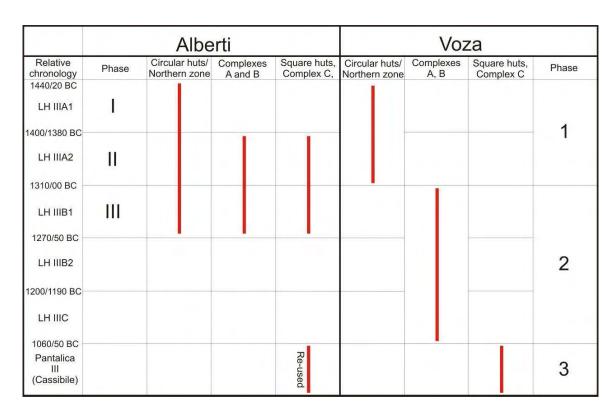


Figure 3.30: Two principal chronological schemes for Thapsos' settlement areas. (After Alberti 2007: 373, table 1.)

There are currently two competing chronological schemes for the settlement areas at Thapsos (figure 3.30). The first one described here was created by the excavator, Giuseppe Voza. Voza's Phase 1 (figure 3.31) is represented by both the northern habitation zone with its compounds, as well as the round huts located in the central habitation area. These compounds involved enclosed spaces containing circular huts, open courtyard areas, and one or two out-buildings of sub-rectangular shape (Doonan 2001: 177, fig. 5a). This kind of layout has broad parallels in other MBA settlements, both in Sicily (Monte Castellazzo di Poggioreale, Sabucina), and on other nearby islands (e.g. Ustica, Panarea, Lipari)

(Albanese Procelli 2003b: 37, 41, fig. 6; Holloway and Lukesh 2001: 14; Doonan 2001: 175-76). This similarity may reflect common socio-economic practices for these settlements, such as the keeping of animals, maintaining small gardens, or any domestic activity better suited to outdoor practice (Albanese Procelli 2003b: 37-38; Doonan 2001: 180). The round huts commonly had central hearths, as well as an inner ring of timber supports suggested by extant postholes (Voza 1973b: 140; Tusa 1999a: 473-74). The presence of "a few" Late Helladic sherds has been reported in context with this phase, but specifically where and in what context is never mentioned (Leighton 1999: 152; van Wijngaarden 2002: 230). Almost all of the stratigraphic pottery is local, and includes forms that may owe some influence to Borg-in-Nadur ware pottery from Malta (Voza 1973b: 148; Leighton 1999: 152; Tanasi 2008: 69). Voza dated this initial occupation to the 15th – 14th centuries BC, based on certain local pottery shapes which had parallels in tombs that also contained LH IIIA1-2 pottery (Alberti 2007: 369).

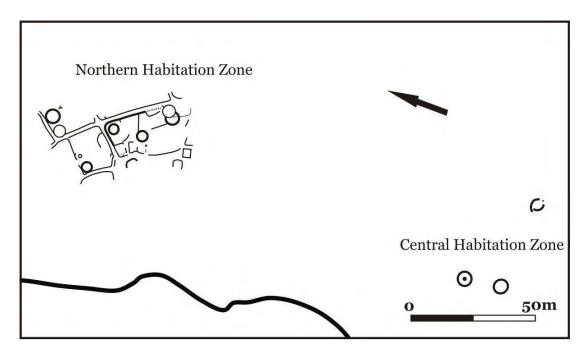


Figure 3.31: Thapsos, Phase 1 (Voza): 1450 - 1300 BC; Phase I (Alberti): 1450 - 1400 BC.

Phase 2 (figure 3.32) displays strong cultural continuity with the preceding period (Tusa 1999a: 475), although there is a clear architectural departure with the construction of the rectilinear courtyard complexes in the central habitation zone. These buildings represent the period of most intensive contact with foreign traders, and are dated by Voza to the late 14th – mid 11th centuries BC. The layout is strikingly different from both the previous phase, as well as any known contemporary MBA or LBA settlements in the central Mediterranean (Doonan 2001: 174). This new plan is often referred to as proto-

urban (e.g. Leighton 1999: 147; Alberti 2007: 364; Militello 2004a: 304), given the more regular street organisation. For Voza, Phase 2 was also characterised by the abandonment

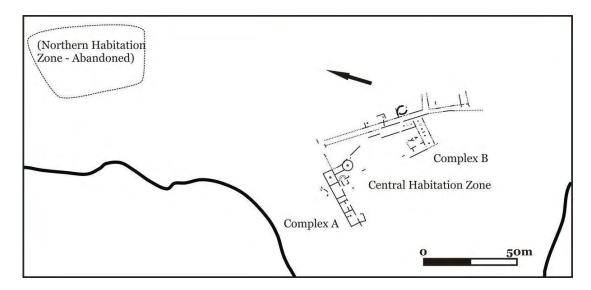


Figure 3.32: Thapsos, Phase 2 (Voza): 1300 - 1050 BC.

of the northern habitation zone, although he did acknowledge a continuity of use for some of the circular huts within the central habitation zone (Voza 1973b: 141). Phase 1 and 2 were both at least partially contemporary with the tombs found across a wide stretch of the peninsula, in the north, central, and southern groupings, and perhaps also with the nine jar burials found in the central group (van Wijngaarden 2002: 229). These jar burials are not a common Sicilian feature, and some scholars have associated them with the LBA arrival of groups from the Aeolian Islands or peninsular Italy (Albanese Procelli 2003b: 68-69; Leighton 2005: 278). They contained no grave goods, making precise dating difficult.

Finally, Phase 3 (figure 3.33) is represented by Complex C, a few square rooms in the central habitation zone that do not follow the same orientation as the Phase 2 complexes (Voza 1973b: 154), and the Capanna Calva building (Bernabò Brea 1970). The square rooms and Complex C have yielded Pantalica III (Cassibile) plumed-ware pottery of the mid 11th – 10th centuries BC. Given what he felt was an uninterrupted succession of levels, without evidence of abandonment, Voza proposed that occupation was continuous throughout these three phases, thereby placing a period of co-existence between coastal Thapsos and the mountain necropolis of Pantalica during the LBA (mid 13th – mid 11th centuries BC) (La Rosa 2004: 27).

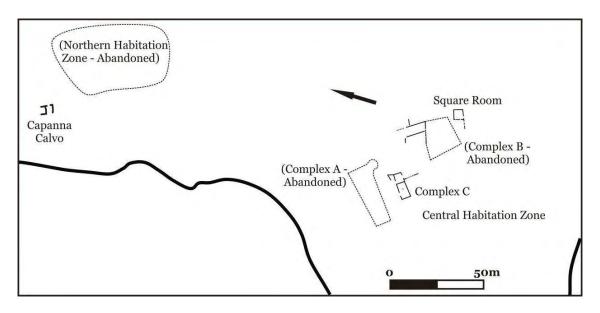


Figure 3.33: Thapsos, Phase 3 (Voza), and re-occupation phase (Alberti): post-1050 BC.

Since no detailed stratigraphy has been published for Thapsos, this 3 phase system has been questioned by other scholars. In particular, Voza's insistence on the contemporaneous existence of Thapsos and Pantalica has been challenged (Albanese Procelli *et al.* 2004: 313; La Rosa 2004: 27). While some Thapsos facies pottery had been found at Pantalica, stratigraphically below Pantalica I North pottery, no corresponding Pantalica I ware has been found on the coast (Alberti 2007: 364; La Rosa 2004: 27). Furthermore, no LH IIIC imports have been recovered from Thapsos, which would be unusual for a coastal emporium supposedly occupied throughout the 12th century BC. Bernabò Brea (1990: 29) hypothesised that there was a moment of coastal abandonment during the early 13th century BC, in the face of threats by peninsular peoples, albeit only a virtual threat with no actual invasion, unlike in the Aeolian archipelago (La Rosa 2004: 28).

Alberti (2004, 2007) has more recently revised both the relative chronology of Thapsos facies pottery and the occupational phases of Thapsos. Relying not only on the data supplied by pottery found in the tombs at Thapsos, but those of the major necropolises throughout the Siracusa region, he has sought to create a more robust relative sequence for local wares based on common associations of local shapes. Voza, on the other hand, only relied on comparisons between the settlement pottery at Thapsos and the pottery in the tombs at that site (Alberti 2007: 369). With his more refined sequence, Alberti then examined the local pottery found in the settlement areas at Thapsos, to test out how well Voza's three phase model fit with the new dates generated. While he agreed with Voza's

architectural progression of round huts, rectilinear complexes, and then re-aligned square rooms, the length of occupation for these various features was re-evaluated.

Unlike Voza, who proposed continuous habitation at Thapsos from the MBA until the LBA Cassibile period, Alberti (2007: 373) believes that the site was abandoned after the mid 13th century BC, and only partially re-occupied during the Cassibile period. He based this gap in occupation on the two above mentioned observations: the lack of LH IIIC imports (and possibly LH IIIB2 as well, according to his scheme -Alberti 2007: 373), and the lack of Pantalica I (North) pottery (mid 13th – 11th centuries BC). The first observation is a somewhat problematic criterion for assuming a gap in occupation on its own. The lack of LH IIIC imports need only mean a decline in the consumption of Aegean pottery during this period, rather than outright abandonment. LH IIIC pottery is not found anywhere else in Sicily either, though, so if the connection between its presence and active settlement was that direct, we must posit that no coastal sites were occupied at this time. The second criterion, the absence of Pantalica I North pottery at Thapsos, however, represents a more serious challenge to Voza's claim of continuous habitation. It was a prominent local style, found not only at the nearby Pantalica necropolis, but also farther west at Caltagirone and Monte Dessueri (Bernabò Brea 1957: 151; Leighton 1999: 175, fig. 92); therefore, its complete absence from the more proximate Thapsos is unusual. Voza's argument, that the Thapsos facies represents a chronological indicator, while Pantalica I pottery is merely a regional style, is unconvincing. As Thapsos is located on the southeast coast (i.e. in the same basic region as Pantalica – see figure 3.26), the absence of Pantalica I pottery is still significant, regardless of whether it reflects a chronological indicator, or simply a regional style. More recently, however, Pantalica I pottery has been found in the west of Sicily (Spatafora 2001: 143), which would seem to challenge the notion that it was regionally restricted.

Alberti's (2007: 373) revised occupational phases propose four periods of occupation. His Phase I, roughly contemporary to the LH IIIA1 period (late 15th century BC), involves both the northern habitation zone compounds and circular huts in the central settlement, in agreement with the first half of Voza's Phase 1 (fig. 3.31). While Voza's sequence involves an abandonment of the northern habitation zone following the construction of the central settlement complexes around 1300 BC, Alberti's chronology allows for a significant period of co-habitation for these areas, based on the presence of similar Thapsos pottery shapes in both zones (Alberti 2007: 368-69). In the Alberti chronology, the central complexes are constructed in the first half of the 14th century BC

(the beginning of his Phase II), and both areas are continuously occupied until his proposed abandonment of Thapsos by 1270 BC (Alberti 2007: 371-72). There are no architectural differences between Alberti's Phase II and III (figure 3.34) – the latter is simply the continuation of Phase II, distinguished by Thapsos shapes that are more commonly associated in Sicilian tombs with LH IIIB1 pottery than LH IIIA2.

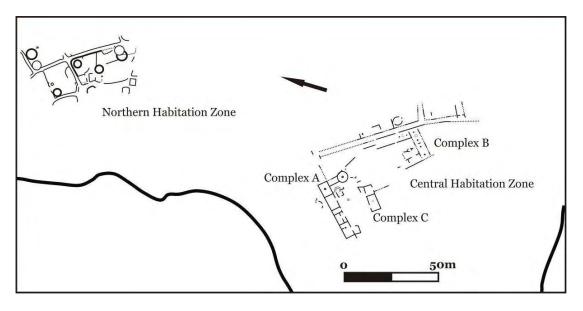


Figure 3.34: Thapsos, Phases II-III (Alberti): 1380 - 1270 BC.

The occupational hiatus following Alberti's Phase III is the major discrepancy between the two chronological frameworks. Following a roughly two hundred year gap, Alberti proposes a re-occupation of Thapsos in the mid 11th century BC, involving the construction of new square rooms, and a re-use of Complex C (Alberti 2007: 372). Thus Voza's Phase 3 and Alberti's (unnumbered) final phase are identical (figure 3.33). The only difference is Voza's phase continues directly on after his Phase 2, while Alberti's phase follows a period of abandonment. The Pantalica III Cassibile pottery which dates the re-use of Complex C and the new square rooms is also supplemented by the presence of later Maltese Bahrija ware pottery. Neither of these two wares has been found in the tombs at Thapsos (Alberti 2007: 373). This might lend weight to the notion of a break in occupation at Thapsos, where the re-occupation of the settlement did not coincide with a re-use of the necropolis, and thereby making all of the rock-cut tombs of MBA date. Furthermore, if the plumed decoration that is a characteristic feature of Cassibile era pottery is regarded as a peninsular influence itself, related to the movement of peoples from Italy into Sicily during the 11th century BC (Leighton 1999: 216; Albanese Procelli 2003b: 87-88), this may also indicate that Thapsos was re-settled, following an occupational hiatus, by a new group of people.

While Alberti's relative sequence is still too dependent upon a handful of associations with Late Helladic pottery in the Siracusa necropolises, his attempt to find more robust associations of local shapes, and the morphological changes that occur within the Thapsos facies, is certainly long overdue. He does attempt to verify his relative sequence via central Mediterranean criteria: the presence of similar pottery in better stratified Milazzese contexts (Alberti 2004: 127), which does seem to support his proposed sequence (Alberti 2006: 373, n. 22). Alberti's reformed sequence of occupation does not address Voza's claim that there is no occupational break in the stratigraphy, and therefore continuous habitation. It is impossible to assess this claim, however, until the site's stratigraphy has been properly published.

This chronological discrepancy does not significantly affect the present study. Either the site was abandoned, and there is nothing to discuss regarding the impact of culture contact for the LBA, or it was not connected to extra-insular networks, and this lack of imports hinders any discussion of consumption and influence. One exception to this could be continued contact within the central Mediterranean, especially with Malta. Unfortunately, the relative sequence and absolute dates for Borg-in-Nadur ware are too broad to judge the presence or absence of a two hundred year gap. In fact, there is no autonomous system for dating Borg-in-Nadur ware, as its early phase of production has been dated based on its presence at Thapsos (Alberti 2007: 369). As for the discrepancy in construction dates for the central complexes, the fifty year gap between Voza's and Alberti's chronology does not prevent an analysis of possible foreign contact. In both periods (i.e. mid or late 14th century BC) there are examples of Aegean pottery (LH IIIA2 and B1) in the tombs (van Wijngaarden 2002: 233), so a discussion of foreign influence is equally valid regardless of the precise date.

3.3.3 Residential Quarters

The living settlements at Thapsos are found near the isthmus, where a slightly raised rocky cliff shelters them from eastern winds (Tusa 1999a: 473). Imported objects date from all phases of habitation at Thapsos, even though the bulk of the evidence comes from tombs. Still, the presence of Maltese pottery in the residential zones, and the architectural styles employed, both allow for a discussion of the impact of foreign materials and practices in the living quarters.

Architecturally, the earliest phase of habitation at Thapsos is represented both by the northern zone compounds and the circular buildings in the central zone. These

constructions seem to follow established Sicilian building practices from the EBA, and similar contemporary settlements can be proposed, at least in a general way, such as I Faraglioni on Ustica, or Punta Milazzese on Panarea (Doonan 2001: 176, fig. 4). This similarity may reflect communication between such settlements, or just long standing functional responses to similar modes of living.

It is the new complexes in the central habitation area that have led scholars to propose foreign influence or involvement. Complexes A and B were organised as a series of roughly rectilinear rooms arranged axially on two or three sides of an open, cobbled courtyard (Voza 1973b: 135, 138; Tusa 1999a: 475; Albanese Procelli 2003b: 38). This was a significant departure from the previous phase's compounds, and the proximity of these complexes to the north and south landings in the isthmus led the excavator to propose that these structures functioned within some part of the maritime exchange infrastructure, possibly as storehouses (Voza 1973b: 140). This assignment is somewhat strengthened by the evidence of pithoi sherds found in some of the rooms surrounding the courtyards (Albanese Procelli 2003b: 38). Another interpretation of these complexes proposes that they represent the formalisation of public space, specifically a place designed to act as the setting for interactions between locals and visitors to the site. Doonan (2001: 179-80) suggests that feasting may have been an important part of such formal relationships, which would explain the dining and serving vessels found in certain rooms of these complexes. Voza (1973b: 140) also raised the possibility that these quite different buildings could have been the residences for foreign merchants, thus representing some kind of enclave within the settlement, or what Smith (1987: 157-58) terms a 'community colony.' Complex A is presented in detail below as a case study for assessing foreign influence.

Complex A (figure 3.35) lies in the extreme northwest corner of the exposed central habitation zone. In overall plan it involves four roughly similar sized rectangular rooms (A – D), three of which have internal benches along their walls (Militello 2004a: 315). These rooms follow a northeast/southwest axis (Voza 1980-1981: 676), with adjacent rooms attached at the northern end (E – H). These attached rooms include two rectangular rooms (E, F) immediately adjacent, running along the same axis, and beside them (to the east), a circular hut (J) and paved courtyard. The circular hut is believed to be a construction from the first occupational phase, and the adjoining rectangular rooms and courtyard pavement have been adjusted to accommodate it (Voza 1973b: 141). A well lies in the west corner of the courtyard, and the complex is bordered by a paved road on its northeast side (Voza 1973b: 135). A small, apsidal-shaped space (G) is imposed upon Room F, and also has an

entrance to the courtyard. Militello (2004a: 314) has suggested that this may have been an oven or furnace. The south-western most rectangular room (D) has a trapezoidal shaped enclosure (I) attached to its east side.

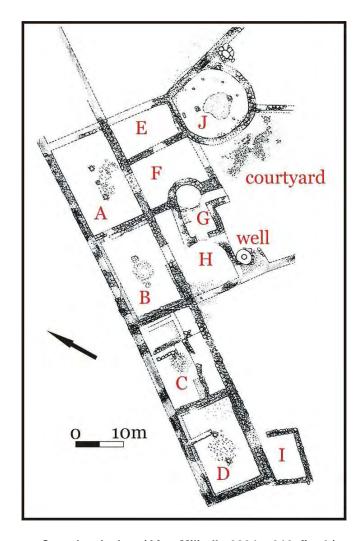


Figure 3.35: Thapsos, Complex A plan. (After Militello 2004a: 316, fig. 6.)

The northernmost of the rectangular rooms (A – which did not have benches inside) contained grinding stones, which indicated to Militello (2004a: 315) storage or workshop activity. The long room beside it (B) was significantly different inside, despite having similar dimensions, and contained benches, a central hearth, and Maltese Borg-in-Nadur pottery. Although Militello (2004a: 315) stipulates that the eastern entrance to this room opened directly onto the courtyard, in the plan there appears to be an intervening enclosed space (H) (perhaps unroofed?) upon which the apsidal room (G) also opened. Nevertheless, the impression is of communal, perhaps dining space, instead of working space, and this may corroborate the idea that the apsidal room was an oven. The next long room to the south (C) has a confusing assortment of inner partition walls, and the last rectangular room

(D) was similar in disposition to Room B, with benches and a central hearth (Militello 2004a: 316).

Beyond the various proposals for the functions of this new building style, there are competing ideas regarding the source of influence for these complexes. Scholars have most often compared them with eastern Mediterranean architecture. Such comparanda (see figure 3.25 above) include the LBA complex at Gla (Tusa 1999a: 498; Tomasello 1996: 1601), Mycenaean megaron layouts (Voza 1973b: 138), the Northeast Building at Pylos (Doonan 2001: 179), certain buildings at Pyla Kokkinokremmos and Maa Palaeokastro in Cyprus (Tomasello 2004: 203), and a complex from Megiddo in the Levant (Militello 2004a: 320). In such comparisons, maritime merchants from the eastern Mediterranean not only provided imported objects, but also information about certain building techniques, and ideas regarding the organisation of public space. Some scholars (Militello 2005: 590; Tomasello 2004: 213) have suggested the presence of Aegean or Cypriot architects, possibly even incorporating a foreign unit of measure (Doonan 2001: 179; Tomasello 1996: 1600-1601). At the extreme end of the scale of foreign involvement, the actual settled presence of a Cypriot community has been proposed (Holloway 1981: 86-87), based on the presence of some Cypriot or Cypriot-looking pottery in the tombs, as well as a scatter of Cypriot artefacts throughout eastern Sicily.

On the face of it, the idea of foreign agency or influence would seem to be justified: these complexes at Thapsos do not resemble any building previously constructed on the site, nor are they paralleled by any contemporary sites in the central Mediterranean (Militello 2004a: 315). Their component features of rectilinear rooms, axial placement, and position around large paved courtyards stand out distinctly from the curvilinear architecture of the previous phase. Furthermore, the nearly grid-like overall plan of the central habitation zone is more regular than the positioning of the different compounds of the northern habitation zone, leading to the suggestion that the site was approaching an 'urban' organisation (figure 3.36) (Voza 1985: 550; Tusa 1999a: 503-504; Vagnetti 2001: 85). It is only this more-regular plan, however, that is held up as evidence of any imminent urban development. It should be remembered that Thapsos did not in fact become a town at any stage, and that the criteria for urbanisation typically involve more than rigid settlement organisation, such as a greater functional variety than what is usually ascribed to Thapsos (Curtin 1984: 8; Osborne 2005: 2). Thapsos' primary function as a port, in fact, not by itself enough to qualify as a town (Braudel 1972: 108), may have contributed to the

occupational gap interpreted by Alberti, if maritime traffic fell off to the extent that a large coastal site was no longer justified.

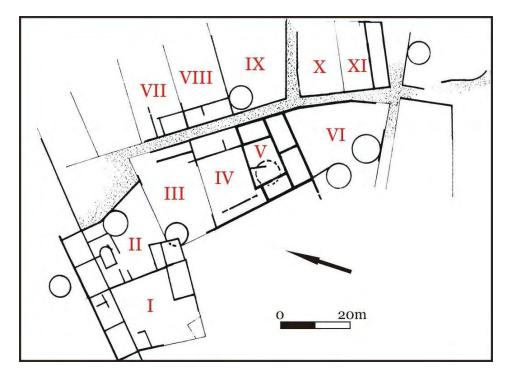


Figure 3.36: Thapsos, hypothetical division of central habitation zone into distinct insulae. (After Tomasello 2004: 199, fig. 10.)

Others have pointed out, however, that complexes A and B show no clear parallel with specific eastern Mediterranean building practices, and any similarities noted, such as the use of rectilinear architecture, are generic at best (Leighton 1999: 154; Albanese Procelli 2003b: 38). In the earlier northern habitation zone rectangular rooms were a part of the architectural compounds, albeit arranged in a different manner, and the Phase 2 complexes in the central habitation zone did not completely abandon traditional architectural traits. This is particularly evident in Complex A, where both the central court and the rooms on the northeast side accommodate the older circular hut (Voza 1973b: 141; Tusa 1999a: 477). The hut is an integral part of the complex, not simply a limiting hindrance on its construction, and has its entrance facing the central court. This integration of a traditional circular hut may also suggest that this complex was not solely involved in maritime exchange and storage, if that was its primary function (Militello 2004a: 318).

Militello (2004a: 318), while accepting foreign influence in the planning of the central complexes, does acknowledge that along with the innovations there is considerable continuity involved. Such traditional features include: the placement of benches around the inner walls; circular hearths; stones with central cavities (presumably to anchor posts for

supporting the roof); and strategically located wells. Moreover, the method of construction clearly follows established local practices: the use of small stones in a double facing for the walls, and the construction of benches out of small slabs and a "coated" filling, have clear precedents both at Thapsos (i.e. in the northern habitation compounds), and in Sicily (Militello 2004a: 318). It would seem, therefore, that regardless of any foreign-inspired plan, or any foreign overseers present, the actual construction of the complexes was performed by local builders. Leighton (1999: 153-54), while acknowledging the marked difference in the central complexes from the northern zones compounds, stipulated that Thapsos should not be considered unorganised in any phase, and any foreign influence proposed for the construction of the complexes should be thought more as a spread of ideas, rather than specific plans (or itinerant architects). In Chapter Five the issue of whether foreign architectural expertise was actually needed at Thapsos is challenged, and an interpretation of these complexes as hybrid architectural forms is proposed.

The final occupational phase represents more of a departure from the previous two. It is represented by a few rectilinear structures that infringe upon previous buildings, and are oriented differently (Voza 1973b: 154; Leighton 1996b: 110; Albanese Procelli 2003b: 38). This phase is not as well represented architecturally as the other two, perhaps suggesting many of the older buildings were still in use, or had been abandoned during a gap in occupation. The layout of one Phase 3 building, Complex C (figure 3.37), involves two adjacent rectangular rooms, whose eastern corner lies on top of an earlier round hut (Leighton 1999: 151, fig 75; Albanese Procelli 2003b: 38; Alberti 2002: 16). It is oriented differently than nearby Complex A, although not dramatically so, and represents a slight clockwise shift in axis towards the northeast/southwest (Voza 1980-1981: 676). This shift is paralleled in other structures thought to date to this phase. The position of finds inside these two rooms suggested discrete zones of activity to Leighton (1999: 191), including a storage area with large jars, a food production area with millstones, and an area dedicated to craftworks, such as weaving (loomweights) and the working of deer antler. This type of arrangement, with inner benches along the walls and a long axis, are reminiscent of the long-houses found at Morgantina, at Metapiccola (Lentini), and to a lesser degree, of the elliptical huts at Borg-in-Nadur in Malta (Leighton 1999: 193; Albanese Procelli 2003b: 50-54). A material connection can be made between LBA Thapsos and Morgantina, through similar Cassibile-style pottery and storage jars recovered from both sites (Leighton 1999: 191). This final phase at Thapsos is also dated by the presence of later Borg-in-Nadur and Bahrija pottery, found in a stand-alone square room to the east of Complex B (Voza 1973b: 151, 154). This room had an even more pronounced axial shift to the

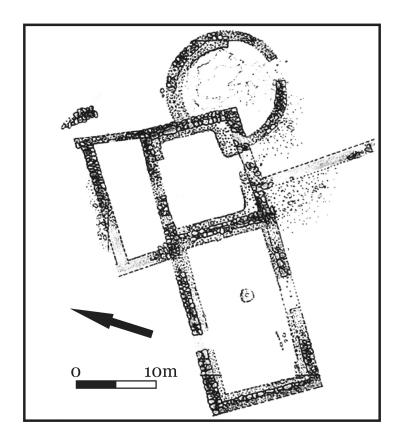


Figure 3.37: Thapsos, Complex C plan. (After Militello 2004a: 317, fig. 8.)

northeast/southwest than Complex C, and a nearly identical orientation to the poorly preserved walls found just to the north, on the other side of the courtyard of Complex B, which partially encroached on the Phase 2 street (Voza 1984-1985: 666). The square room also contained significant amounts of Cassibile plumed ware pottery (Voza 1973b: 154).

Beyond issues of architectural influence, there is evidence for more certain foreign material in the habitation areas of Thapsos, particularly Maltese pottery (figure 3.38). This pottery is almost as plentiful at the site as Aegean or Cypriot wares, although it is hardly as well published or discussed. Furthermore, while the amount and location of the few Aegean sherds found in the settlement remain unpublished ("about ten" in Wilson 1987-1988: 113), there have been specific locations given for some of the find spots of both Borg-in-Nadur and Bahrija facies pottery. In the northern habitation zone (possibly phase 1) one hut (from quadrant XLIV/24 – easternmost part on the zone) contained a deep bowl and a jug (Tanasi 2008: 39-40), which were described as being from the initial phase of the Borg-in-Nadur facies (Voza 1973b: 147). In the central habitation area, Complex A has produced four sherds (Tanasi 2008: 38), all found in the western corner of Room B (i.e. one of the rectangular rooms with benches and central hearth) (Militello 2004a: 316). These sherds are broadly classified as Borg-in-Nadur pots, and include two cups with T-



Figure 3.38: Selection of Maltese pottery from the settlement zones at Thapsos. A,C: cups with T-shaped handles found on the surface, south of Complex B; B: axe-shaped cup handle; D: deep bowl with two handles from a circular hut in the northern habitation zone. (After Voza 1973a: plate IX.)

shaped handle, and two vertical handle fragments likely belonging to cups (Tanasi 2008: 38). There were also four surface finds, discovered just to the south of Complex B (Tanasi 2008: 38-39). These included an axe-shaped jug handle (Voza 1973a: 44, Plate IX: 138), part of a cup which Voza (1973a: 45) felt represented a known Borg-in-Nadur style (c.f. Evans 1953: 70, fig. 11: 101-102), and two cups with T-shaped handles. While the handles of these latter two cups do appear to be features of the Borg-in-Nadur repertoire, they have never been found in Malta attached to these specific hemispherical cups. Tanasi (2008: 61) felt these cups were reminiscent of Evans' type 95 vessel (Evans 1953: 70, fig. 11: 95), although the Maltese variety has a more angular, conical cup, and a longer, more Y-shaped handle, like a dipper. For this reason, Voza (1973b: 148) suggested the Thapsos cups were locally made.

Phase 3 also has yielded Maltese pottery in the Thapsos settlement, this time belonging to the Bahrija facies. An unspecified number of Maltese pots were found in the largest rectangular room of Complex C, dating to its period of re-use (or of its first construction in Voza's scheme), which were considered to be either very late Borg-in-

Nadur vessels, or Bahrija period ones (Voza 1980-1981: 678). A number of similar Maltese shapes, in context with plumed ware (Cassibile) pottery, were found in the Phase 3 square room to the southeast of Complex B, indicating an $11^{th} - 9^{th}$ centuries BC date (Voza 1980-1981: 679). These included two small cups and a larger *boccaletto* mug (Voza 1973b: 151, fig. 9).

Assuming the pictured vessels represent an accurate total of what was found, the amount of Maltese pottery in the living settlement at Thapsos breaks down as follows: two from Phase 1 (northern zone); eight from or near Phase 2 complexes; and nine from Phase 3 contexts. These nineteen pots, representing every phase of occupation at Thapsos, led Militello (2004a: 328) to suggest that perhaps the connection with Malta was the most significant and enduring for the east coast of Sicily. Tanasi (2008: 140) preferred to stress the importance of the eastern Mediterranean materials at Thapsos (and perhaps Cannatello as well – see below), as important drawing factors for Maltese traders: their need to access these foreign goods, particularly if eastern Mediterranean ships did not journey to the Maltese archipelago itself. As corroboration, he cites the absence of Maltese objects in Sicily during the Pantalica North period – as mentioned above, a period also noted for its lack of Aegean pottery. From this perspective, without the eastern Mediterranean goods to entice them, Malta lost any motivation for contact with Thapsos, and it was not until the Bahrija/Cassibile period that such contacts were renewed, perhaps now with Ausonian and peninsular Italian goods providing the incentive (Tanasi 2008: 85-86). A sharper chronology for Maltese pottery typology would certainly help in assessing the contemporaneity of Maltese and eastern Mediterranean materials in Sicily.

Finally, also to this last phase belong two rooms investigated by Bernabò Brea (1970) in the 1960s, referred to as Capanna Calvo. These severely damaged rooms were part of a larger building of which little remained, and were located just to the northwest of the northern habitation zone (Bernabò Brea 1990: 56). Although he originally assigned them to the MBA, Bernabò Brea would later re-assign them to the Cassibile period: the pottery recovered (e.g. a raised handle carinated cup – Bernabò Brea 1970: 147, fig 4a) is consistent with such a date (compare Leighton 1999: 205, fig. 109). Of particular interest to this study is the discovery of a bronze rod with animal figures (figure 3.39) in Room A (Bernabò Brea 1970: 146; Voza 1973a: 52). This object has been compared to Sardinian bronzes (Giardino 1995: 34), although the latter do not generally have the animals aligned in parallel on their rods, but are instead 'impaled' on the ends (e.g. Lo Schiavo 1985a: 262, fig 276). That said, there is nothing within the range of Sicilian bronze objects to compare

this rod to either. Other bronze rods, found in four of the tombs at Thapsos (2, 22, 37, 38 – Alberti 2006: 380, table 1), did not have figures on them.



Figure 3.39: Comparison of bronze animal figures. A: rod with 2 quadrupeds from Thapsos, Capanna Calvo; B: bronze wolf figure from Serri, Nuoro (Sardinia); C: bronze horned animal figures 'impaled' on rods from Teti, Nuoro (Sardinia). (After Voza 1973a: plate XII; Lo Schiavo 1985a: figs. 254, 276.)

3.3.4 Tombs

The various rock-cut tombs scattered about the peninsula have been dated to the first two (MBA) phases of occupation at Thapsos. Much has been made of the foreign pottery found in the tombs, especially the Aegean ware (figure 3.40: A-D), although there were also two Cypriot-looking Base Ring jugs and two White Shaved juglets (figure 3.40: E-F) (Vagnetti 2001: 78), and sixteen Maltese pots (Tanasi 2008: 34-37). The focus on the Aegean ware is understandable in the context of the overall consumption of Aegean pottery in Sicily, where only Cannatello has more published examples. Within Thapsos itself, however, it should be noted that of the sixty-seven published tombs (fifty-eight rock-cut tombs and nine jar burials), only twenty-two have yielded Aegean pottery (van Wijngaarden 2002: 231, table 16.1). When the category is broadened to include "Aegean-derivative" pottery and metalwork, the total increases to only twenty-five (Vianello 2005: 203-204, table 5). These twenty-five tombs also encompass the Cypriot pottery found (in Tombs A1 and D, which also had Aegean pottery) and six of the ten tombs that yielded Maltese pottery.

There was likely more imported pottery and other materials in the tombs, but poor preservation, re-use, and looting have left us ignorant of the contents of the remaining two hundred burials (van Wijngaarden 2002: 233).



Figure 3.40: A selection of eastern Mediterranean pottery from Tomb D at Thapsos. A: Aegean alabastra; B: Aegean shallow cup; C: Aegean deep bowl; D: Aegean piriform jar; E: Cypriot Base Ring jugs; F: Cypriot White Shaved juglet. (After Marazzi and Tusa 2001: 165-67, 169-70.)

In terms of shapes, three-handled piriform jars are the most representative form (sixteen), followed by alabastra (nine) (van Wijngaarden 2002: 233, table 16.2). This conforms to a general preference for these shapes island-wide (Vianello 2005: 207, table 8). It would seem, therefore, that these particular forms and their contents did make a minor impact on the funerary practices of MBA Sicilian society, at least in places where access to such goods was available. For the rest of the Aegean pottery, only the stirrup jar and jug are represented more than once (two and three examples respectively) in the tombs. This means that thirty of the thirty-nine recognised examples of Aegean pottery are

represented by just four shapes, with the nine remaining divided up between single instances of cups, bowls, amphorae, and uncertain fragments (van Wijngaarden 2002: 232, table 16.2). Chronologically speaking, the presence of Aegean and Cypriot pottery in the tombs at Thapsos should be put in perspective. While the range does extend from LH IIIA-B (D'Agata 2000: 63; Vianello 2005: 202, table 3), the majority of the examples belong to the earlier end of the spectrum (Taylour 1958: 56-60, plate 9; van Wijngaarden 2002: 233), and could therefore reflect the pottery consumption of only a few generations. When coupled with the fact that most of the twenty-two tombs containing Aegean ware had only one or two pots each, then even in the narrow timeframe in which Aegean pottery was in demand, consumption was not prominent, and never exceeded 10% of any assemblage (Blake 2008: 11).

Alberti (2006) has attempted to construct a social hierarchy for the settlement based on the disparity of goods in the tombs. To accurately assess varying levels of wealth in these tombs two obstacles need to be overcome. First, as these are multiple inhumation tombs, care must be made not to mistake a rich assemblage with a busy tomb, used over a longer period of time (van Wijngaarden 2002: 234). Secondly, there needs to be an independent means for assigning value to any class of object, assuming that it is not sufficient to pre-suppose a foreign object is necessarily more prestigious than a local one. To address these issues, Alberti (2006: 372) selected tombs of no more than five burials to cross-compare. Thus, the ample grave goods from tombs D and 10 are omitted, as the forty-nine burials in each tomb may artificially inflate the richness of their assemblages. In order to avoid an arbitrary measure of worth for individual classes of material, a formula was constructed that placed the rarity of an object as its defining value. The formula derived is: V = NtC/NM, where value (V) equals number of total contexts (NtC), in this case thirty-seven burials, divided by the number of times a class of object appears in these contexts (NM) (Alberti 2006: 384). For these evaluations of frequency, the larger tombs were considered as well. Hence, both iron and gold ornaments were given the highest possible score of thirty-seven for appearing once in the thirty-seven contexts studied (tombs 48 and D respectively). At the opposite end of the scale, local pottery (both plain and decorated) received only a 0.5 score for its frequent appearance in the burials (Alberti 2006: 377, fig. 3).

While this seems a rather democratic and impartial way of dealing with the dataset, the limitations of the evidence itself make any interpretations of social hierarchy problematic. As mentioned above, preservation is an issue at Thapsos, where not only the

environment, but also human activity (e.g. looting, quarrying) has affected the amount of data recovered. So, if one other context contained a surviving gold ornament, by Alberti's formula, gold objects would be worth half as much as iron ones. The fact that much more data has been recovered from Voza's more recent excavations than Orsi's late 19th century explorations likely speaks of the greater precision of modern archaeological practice, and would certainly skewer frequency totals (van Wijngaarden 2002: 233). Furthermore, while eliminating large multiple burials from analysis of the richness of burials may seem like a proper precaution, this is only logical if the social status is indicated by grave goods alone. A large tomb, containing many individuals, may in itself be an indication of the importance of the family through its continued use over time.

Beyond this problematic data set, it is not known whether everyone from the settlement at Thapsos was eligible to be buried on the peninsula. Conversely, was this large necropolis, with over three hundred tombs, actually an extra-communal burial, representing the final resting places of individuals who did not live in the residential quarters? For the purposes of this study, which is interested in the consumption of foreign goods and the implications this has for islander identities, exotica's ability to confer or legitimate social status is a concern; however, this is too difficult to determine given the limitations of the funerary data available at Thapsos. In general, van Wijngaarden's (2002: 235) conclusion that there is no apparent connection between wealth and the presence of Aegean pottery in these tombs is adopted as a working hypothesis. While he accepts that such eastern Mediterranean goods could have had a prestige value as imports, no different from other exotic items (e.g. Maltese pottery), he also admits that there is no correlation between the elaborateness of the tombs themselves, and the presence or absence of foreign objects (van Wijngaarden 2002: 234). At the very least, there would appear to be other ways of obtaining and displaying funerary status at Thapsos beyond the consumption of foreign objects, including the display of complex local pottery (e.g. large pedestal basins), the architectural elaboration of tombs (especially entrances), and perhaps the location of the tomb on the peninsula.

Aside from their ability to confer status, there has been discussion of the impact of foreign ceramics on local pottery manufacture at Thapsos (D'Agata 2000; van Wijngaarden 2002: 235-36; Alberti 2004: 137-38; Harding 1984: 257-58). This includes local shapes that are believed to be derived from foreign pottery, certain decorative techniques, and in the case of Cypriot pottery, actual imitation (Alberti 2005: 343-44). The majority of such analyses emphasise the 'Mycenaean impact' on Sicilian potters, where the absence of the

spread of eastern Mediterranean technologies (e.g. wheel shaping, firing techniques, and painting) prevented local potters from producing actual imitations of Aegean pottery (as in southern Italy), rather than any choices (appropriations and rejections) made by these potters (Tanasi 2005: 563).

D'Agata (2000: 64) outlines two classes of pottery influenced by Aegean wares: close imitations and Aegean-derivative pottery. The close imitations, which are not actual imitations like in southern Italy because of differing production techniques, are represented by the Cypriot Base Ring jugs (figure 3.40: E). The assumption of local manufacture for these jugs has not been confirmed by petrographic analysis, but is solely based on the visual observations of Karageorghis (Alberti 2005: 343-44). Vagnetti (2001: 80, n. 3) noted, however, that while the fabric is not typically Cypriot, it does not match Thapsos ware fabrics either, and tentatively suggested a Levantine origin. If correct, then these jugs do not belong in D'Agata's close imitation category, and are simply other imports. The copper oxhide ingot fragment found in the northern habitation zone (Vagnetti 2000b: 313), if Cypriot, could be used as further proof that actual imports from Cyprus did make it to Thapsos from time to time, although it also could also have come from more proximate Sardinia (Giardino 1992: 308).

The other class of Aegean-inspired wares at Thapsos, better represented in the ceramic assemblage, are the so-called Aegean-derivative wares (see figure 3.13 above). These are local pots, which display formal elements believed to be derived from foreign wares, but do not outright copy shapes, and in outward appearance (i.e. finishing techniques) seem to belong to the traditional Thapsos facies. As such, the interpretation of derivation remains a subjective exercise (Harding 1984: 10). Vessels falling into this category include a cup with an M-shaped handle (D'Agata 2000: 64-65; Leighton 1999: 173, fig. 91.3), which has been compared to Cypriot cups; tubular-spouted jugs (figure 3.2: C) which resemble Late Helladic and Cypriot White Painted feeding bottles (D'Agata 2000: 71); and two-handled bowls or large cups (D'Agata 2000: 73-75), which recall LH IIIB deep bowls (figure 3.13: C1, C2). Some incised decorations on Thapsos pottery were actually figurative – a practice unknown in traditional Sicilian pottery – and these representations (quadrupeds, birds) are themselves believed to be derived from Aegean, Cypriot, or Levantine motifs (D'Agata 2000: 76; Leighton 1999: 174). Such figurative decoration, however, is not very common at Thapsos, and unknown elsewhere in Sicily.

As mentioned in section 3.2, the *tholos*-type variety of rock-cut tomb has also been proposed as evidence of foreign influence, and even foreign presence, at Thapsos (figure

3.41). The actual number of *tholos* tombs at Thapsos is difficult to gauge, although it is certainly in a strict minority. Tomasello (1995-1996: 153-60) lists nine examples (or 3% of the approximately three hundred tombs), while Militello (2004a: 323, n. 84) is only willing

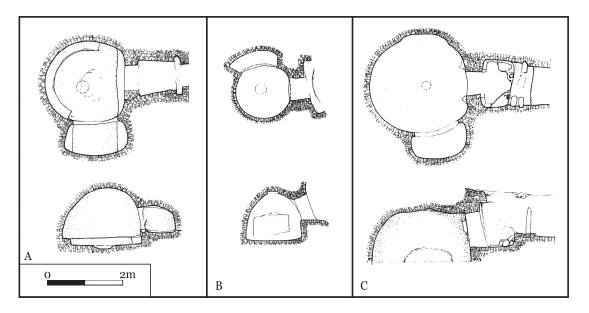


Figure 3.41: *Tholos* tombs at Thapsos. (L to r): Tomb A, Tomb B, Tomb C, plan and section. (After Tomasello 1995-1996: 154, fig. 87.)

to accept at most two examples (tombs B and 12), which he felt may actually be the same tomb recorded twice. The discrepancy appears to be in how strict a definition of *tholos* is given. Depending on which definition is accepted, either five of the nine Thapsos tombs contained Aegean pottery (C, D, E, 30, and 51), or none of them did (Tomasello 1995-1996: 153; Vianello 2005: 203-204; Militello 2004a: 323). The rarity of this tomb type, in a place where direct contact with extra-insular peoples is a plausible interpretation, must have repercussions for any assumed Aegean influence read into *tholos* tombs located in interior sites, where direct interaction with foreigner architects is less likely to have occured. The presence of Aegean architects, as indicated by *tholos* tombs or the Thapsos complexes, is critically examined in Chapter Five.

It is apparent that the site of Thapsos, whether it qualifies as a type site for MBA and LBA Sicily or not, is central to any discussion of the impact of interactions with foreign peoples and materials. Beyond Thapsos, however, any eastern Mediterranean penetration seems rather circumscribed. The exception is Cannatello in Agrigento. The following case study looks at that site, and the central and western regions of Sicily overall, to compare patterns of extra-insular contact.

3.4 Central and Western Sicily

For the purposes of this study, central and western Sicily is defined broadly as those provinces that do not have a coastline on the eastern side of the island. These include: Trapani, Palermo, Agrigento, Ragusa, and Caltanissetta (figure 3.1). Enna, although not having an eastern coastline, perhaps should be considered more properly to fall within an eastern contact zone, and any imports found or influences detected there (aside from the extreme south of the province) are more likely to have been conveyed via the more proximate east coast. It has produced very little evidence of foreign material connections, however, and therefore does not alter any spatial or temporal patterns noted.

Fifteen sites in the central and western provinces have produced evidence of imports or influences from the central and western Mediterranean, and 18 that have eastern Mediterranean imports or influences. The west of Sicily has not been as intensely studied as the east coast, particularly for prehistoric periods, and consequently has produced less evidence for contact (Leighton 2005: 262). Cannatello is the key exception to this trend, and is examined in detail first.

3.4.1 Cannatello

Cannatello (figure 3.42) is located along the south coast of Sicily, southeast of the modern town of Agrigento (ancient Akragas). Unlike Thapsos (but similar to Nuraghi Antigori – see section 4.3), the site is not immediately on the coast, but lies 1.5km inland. It is situated



Figure 3.42: The location of Cannatello along Sicily's south coast. Inset: part of south coast displayed.

on a low hill, 51m above sea level (De Miro 1999b: 439), and may have had an unobstructed view of the sea. As such, it fits into Leighton's (1999: 150) category of seabord sites with imported materials. The location of its associated ancient harbour is unknown. The coast most proximate to the site today offers no natural harbour, although it is sandy (figure 3.43), which could have allowed ancient mariners to pull their vessels up onto the beach. This part of the south coast offers several access points to the interior of Sicily via river valleys.

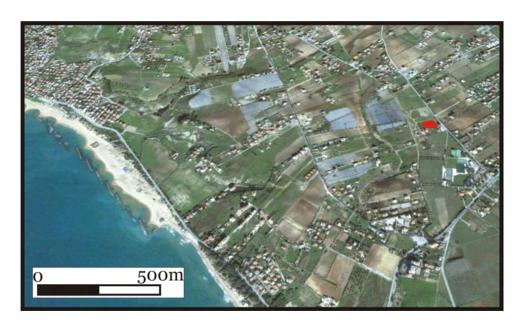


Figure 3.43: The location of Cannatello (red circle) in relation to the coast.

Cannatello is circular in plan, approximately 70m in diameter, and enclosed by a thick wall. Only the north-eastern quadrant of the site has been exposed in modern times, although trial trenches on the west side do suggest a continuation of the surrounding wall (De Miro 1999b: 439). Cannatello has produced evidence of materials from the Aegean, Cyprus, Malta, and Sardinia. Investigations in the vicinity of Cannatello were first undertaken at the end of the 19th century, by Orsi and Rizzo. Their casual finds consisted of eight huts (Deorsorla 1996: 1029) one of which held two pots with bronze objects inside, including four spearheads and two swords (Lombardo 1985: 355). Early explorations also produced an Aegean piriform jar (figure 3.12: C), found in a location called the 'Marina di Girgenti' (Taylour 1958: 63). Due to the imprecise location of these first forays, it is unclear if Mosso, when further excavations were undertaken a decade later, was digging in precisely the same spot (Vianello 2005: 113). This 1907 investigation uncovered two ancient roads, two huts adjacent to one of them (which was interpreted as a domestic sanctuary – Mosso 1907: 640), and most significantly, a levelled circular platform of about 60m in diameter, containing six circular huts and one rectangular

building (Tusa 1999a: 585). Although the roads and the domestic sanctuary have not been relocated, the circular area is almost certainly the area that has undergone more extensive, modern excavations since 1989 (De Miro 1996, 1999a), and which represents the case study that follows (figure 3.44).



Figure 3.44: Cannatello, site plan. Inset: location of Cannatello on the south coast. (After De Miro 1999b: 440, fig. 1.)

Excavations have revealed two principal phases of construction for the wall, and three phases for the buildings inside. These buildings, as at Thapsos, show a combination of circular and rectilinear architecture (Castellana 2002: 130; Vianello 2005: 79). The earliest phase of the Cannatello enclosure is represented architecturally by the inner two rings of the fortification wall, which at this point had two narrow entrances along the northeast. Within this circuit only three buildings are associated with the first phase (figure 3.45). These are circular Hut 8, rectilinear Hut 3a, and an earlier phase of Hut 2 (De Miro 1999b: 446). These structures are associated with a greyish layer of soil, which contained Thapsos-facies pottery (mostly cups), and the majority of Aegean imported pottery of LH IIIA date (Castellana 2002: 130). This conforms to the stratigraphy of the interior site of Serra del Palco in the Platani Valley, located approximately 23km to the northeast of Cannatello, whose stratum IX contained similar Thapsos pottery and LH IIIA sherds (De

Miro 1999b: 448; Tusa 1999a: 527). For these reasons, the earliest phase at Cannatello has been dated to the 14th century BC (Albanese Procelli 2003b: 40).

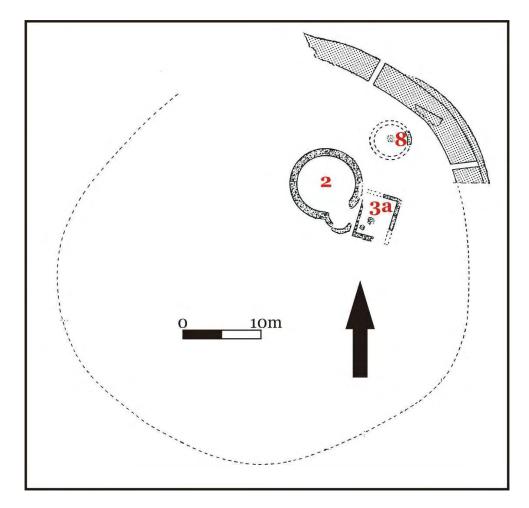


Figure 3.45: Cannatello, Phase 1. (After De Miro 1999b: 440, fig. 1.)

The inner circuit of the defensive wall may have been partially destroyed, based on some evidence for burning on its southern, outer face (De Miro 1999b: 442). In any event, in Cannatello's second phase (figure 3.46) the wall was further augmented by two more rings to the outside, with the two previous entrances blocked and replaced by a single, wider opening on the northwest. This second wall phase is associated with a second phase of construction inside, represented architecturally by a trapezoidal shaped inner partition, three circular huts – 2, 7 (superimposed on the earlier Hut 8), and 9, and five rectangular huts – 1, 3, 4, 6, and 10 (Castellana 2002: 130). These constructions are associated with a yellowish coloured soil, which contained later Thapsos pottery and a few LH IIIB sherds (Vianello 2005: 113). The Thapsos pottery was similar to Serra del Palco's stratum VIII, and similar cups have also been recovered from a tomb at Monte Campanella, located near Serra del Palco, which were found in context with a LH IIIB-C (locally made) amphora (De Miro 1999b: 448) All of the buildings, with the exception of Hut 1, were located inside

the trapezoidal partition wall, which had a 'forceps' shaped entrance – an overlapping curved wall, also seen in front of large Hut 2 – along its southern side (De Miro 1999b: 442). This second phase is also associated with four small circular platforms of uncertain function located outside of the defensive wall (De Miro 1999b: 442). This busy phase has been dated to the 13th century BC (Castellana 2002: 130).

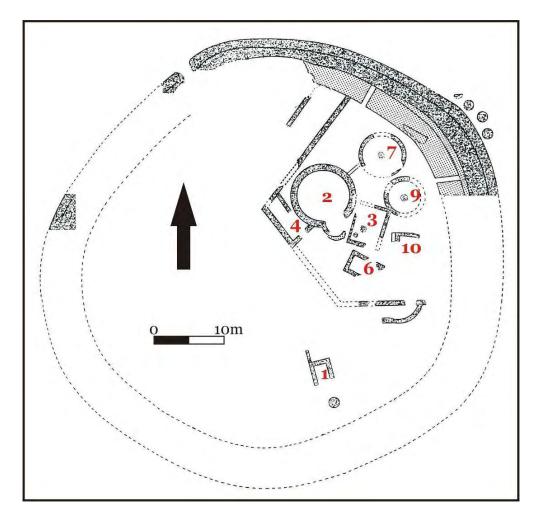


Figure 3.46: Cannatello, Phase 2. (After De Miro 1999b: 440, fig. 1.)

The final phase (figure 3.47) is only known by two structures: circular Hut 5, and a later phase of rectangular Hut 3. Hut 5 was actually built on top of the inner subtrapezoidal partition, and would seem to indicate that this inner area was no longer cordoned off. No date for this final period of occupation has been specifically offered by the excavator; it is presumed to fall somewhere within the *Bronzo Finale* 1 period (i.e. within the 12th century BC) (Albanese Procelli *et al.* 2004: 324). In terms of chronological range, Cannatello is envisaged as being largely contemporary with Thapsos, particularly Thapsos' second and third phase (Tanasi 2008: 105). If some of the imported pottery at Cannatello can be assigned to the LH IIIB2 period, then it is possible Phase 2 continued

beyond the mid 13^h century BC (Castellana 2002: 131), during the period when Thapsos may have been temporarily abandoned (Alberti 2007: 364). Unlike at Thapsos, however, there appears to be no Cassibile period ($11^{th} - 9^{th}$ centuries BC) phase.

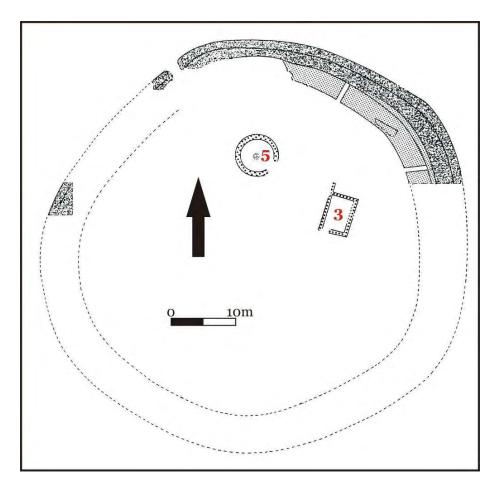


Figure 3.47: Cannatello, Phase 3. (After De Miro 1999b: 440, fig. 1.)

While the combination of rectangular and circular architecture is a feature Cannatello shares with Thapsos and other MBA sites (I Faraglioni, Punta Milazesse), the actual execution of this combination at Cannatello is unique, and defies simple spatial analysis. While Thapsos' northern habitation zone had certain contained complexes, similar in plan to the settlements on Ustica and Panarea (Leighton 1999: figs. 75, 79, and 82), the concurrence of curvilinear and rectilinear elements at Cannatello is more jarring, and difficult to interpret. For certain scholars, the presence of rectilinear architecture is tantamount to the presence or influence of eastern Mediterranean peoples (Tusa 1998b: 173; Tomasello 2004: 196; Castellana 2002: 123). The closest parallel to the layout at Cannatello, however, is the contemporary site of Mokarta (Trapani), where not only is there a random-looking conjunction of rectangular rooms and circular huts, but also the 'forceps' shaped entrance on many of its huts (figure 3.48), similar to Hut 2 and the trapezoidal enclosure at Cannatello (Tusa 2009: 30). At Mokarta, however, there is no

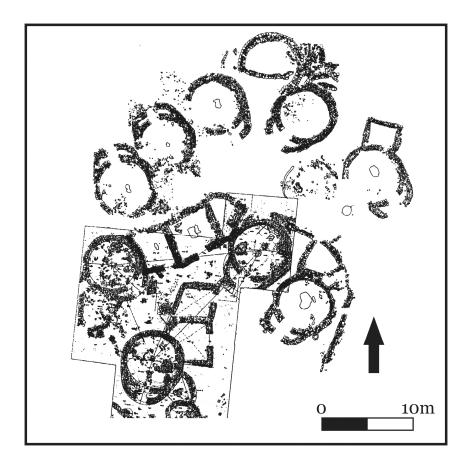


Figure 3.48: Plan of Mokarta, showing the combination of rectilinear and circular elements, and 'forceps' type entrances to many of the huts. (After Tusa 2009: 43, fig. 5.)

evidence of eastern Mediterranean imports, so any straightforward equation of rectilinear architecture with Aegean or Cypriot influence is not secure. Cannatello's thick circular defensive wall is also a unique feature on the Sicilian mainland, and it is more directly related to the structures within it than Thapsos' ill-preserved and ill-defined walls, which lie farther out in the peninsula (i.e. closer to the tombs than the settlement areas). Only I Faraglioni (Ustica) has a similar defensive feature, although its execution is distinct, involving irregularly spaced, semi-circular towers (Holloway and Lukesh 1995: 72).

There is evidence of metalworking activities at Cannatello, which comes in the form of four sandstone moulds, two found in the 19th century and two during the more recent excavations (Albanese Procelli 2003a: 15). They contained matrices for flat axes, swords, and an uncertain shape, perhaps for the production of pendants (Albanese Procelli 2000: 77). The sandstone used in the manufacture of the moulds is local to the Agrigento region (Albanese Procelli 2000: 85), and one of the four may in fact be unfinished (Albanese Procelli 2003a: 15), testifying to local metallurgical practices. Albanese Procelli (2003a: 15-16) cautions, however, that since there is no clear contextual connection between the findspot of the two moulds found in the 19th century, and the hut where the metal objects

(in two pots) were found, Orsi's claim that the latter was the site of a foundry should be regarded sceptically. Along with these locally produced moulds, there is evidence of some involvement in the extra-regional exchange of metals, in the form of a (now lost) copper oxhide ingot fragment (Giardino 1995: 293). As mentioned in conjunction with the Thapsos ingot fragment, whether this object should be considered representative of a connection to the eastern Mediterranean, or to more proximate Sardinia is unknown. Both Sardinian and Cypriot materials have been recovered from Cannatello (see below). In either case, interaction with extra-insular peoples is suggested.

Cannatello is unique in Sicily for the range of imported ceramics that have been reported there. These include the aforementioned Aegean pottery (figure 3.49), some Cypriot vessels, Borg-in-Nadur ware from Malta, and a significant amount of Nuragic pottery from Sardinia (Lo Schiavo 2003: 17; Levi 2004: 234, 237). The amount or ratio of imported versus local pottery has never been published. Vianello (2005: 112), basing his totals on the descriptions and images published by De Miro (1996), offers a total of forty-one Aegean or Cypriot pots for the site, although he admits there could be more unpublished sherds. De Miro (1996: 998) is less specific, referring to a total of about fifty sherds. Their relationship to local materials is only addressed in terms of stratigraphy, not quantity: only rarely is the larger quantity of local material referred to, including the

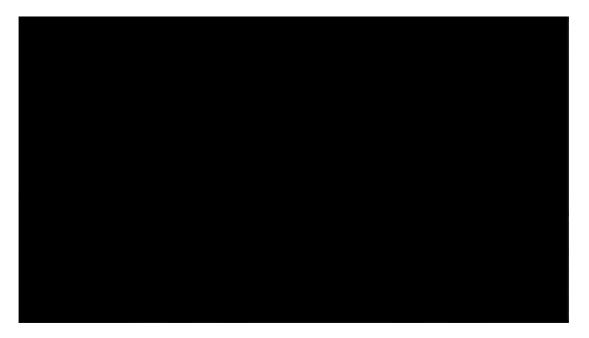


Figure 3.49: A selection of Aegean sherds from Cannatello. Specific contexts not published. (After Marazzi and Tusa 2001: 186-89.)

prevalence of Thapsos facies shapes (Fiorentini 1993-1994: 719; Deorsorla 1996: 1033; Vianello 2005: 112). This imprecision has allowed other scholars to generalise about a

strong Mycenaean or Cypriot character to Cannatello (Castellana 2002: 130; Fiorentini 1993-1994: 719). Contextually, there is only one mention of a specific findspot for the Aegean or Cypriot material – Hut 8 – in the first phase (grey-soil stratum), where abundant local material and diverse LH IIIA sherds were discovered (De Miro 1999b: 446). This grey stratum represents the context for the larger portion of the Aegean or Cypriot material recovered (De Miro 1999b: 448); no contextual information is given for the lesser amount of LH IIIB or C pottery found in the above two strata. This is disappointing, given that a catalogue of thirty-five imported sherds has been published (De Miro 1996: 1006-11), to which rough contexts could easily have been added.

A recurrent theme throughout the publication of the imported pottery at Cannatello is its presumed Cypriot flavour (De Miro 1996: 999; 1999a: 79; 1999b: 448-49; Castellana 2002: 131; Alberti 2008b: 134-35). De Miro (1996: 999) outlines the following Cypriot elements to the materials at Cannatello: actual Cypriot shapes recovered, such as a fragment of a wavy-banded pithos (figure 3.50: C); a hemispherical cup with inward-



Figure 3.50: 'Cypriot' features of pottery from Cannatello. A: stylised sea-shell motif; B: Cypro-Minoan symbols on amphora handles; C: Cypriot wavy-banded pithos; D: White Slip II cup. (After Marazzi and Tusa 2001: 187-88; De Miro 1996: 1004-05.)

bending rim and vertical band decoration, not seen in Late Helladic pottery, but which seem part of the Cypriot White Slip II vernacular (3.50: D); decorative motifs on pots that are better represented in the Cypriot regional variety of LH III ware, such as the stylised sea shell (3.50: A); three amphora handles with markings on them, which are reminiscent of Cypro-Minoan script (3.50: B); and "a certain number" of incised dark sherds that have the "buccheroide strigilata" of Base Ring I wares.

The wavy-banded pithos has been compared to an example found at Antigori (De Miro 1999a: 79; Vagnetti 2000a: 83), which has been petrographically analysed and assigned a Cypriot origin (Jones and Day 1987: 262). Only one imported sherd, from a coarseware stirrup jar, has been analysed from Cannatello, which yielded a central Cretan provenience (Day and Joyner 2005: 312). A table (published in Levi 2004: 235) indicates two large storage jars from Cannatello have a Cypriot provenience, although the reference for this analysis is not included. The markings on the amphora handles have no direct comparanda with Cypro-Minoan script, although the practice of conspicuously marking handles is more prominent in Cyprus than the Aegean (Hirschfeld 2001: 124). The actual Cypriot flavour of the decorative repertoire read into the Late Helladic wares, however, seems particularly forced, and the references used to back up this claim are rather esoteric (De Miro 1999b: 448, n. 5). The insistence upon a Cypriot connection also somewhat dilutes De Miro's own labelling of Cannatello as a 'Mycenaean emporium' (see below), although for many who emphasise the importance of an eastern Mediterranean presence in Sicily no distinction is drawn between the Aegean and Cyprus.

An intriguing feature of the ceramic assemblage at Cannatello is the discovery of Nuragic pottery from Sardinia. This pottery has been found all over the site (Lo Schiavo 2003: 18), and includes both actual imports from Sardinia (closed shapes, large storage jars), and the local production of open vessels (Levi 2004: 237; Albanese Procelli *et al.* 2004: 324). No detailed contextual information or quantification has yet been published. One of the imported large storage jars had an incised meander pattern on top of its rim, similar to examples from Sardinia, and to an imported Sardinian pot found at Lipari dated to the Ausonian II period (12th – 10th c, BC) (Levi 2004: 240, n. 17). Maltese pottery has also been discovered at Cannatello (Tanasi 2008: 3, n. 1). The diverse fragments have been described as red-slipped, and frequently of closed shape, but unfortunately any detailed analysis or contextual information has yet to be published (Levi 2004: 237, 240, n. 23).

De Miro (1999a; 1999b) often refers to Cannatello as a Mycenaean emporium, although he is somewhat vague on what specific role foreign agents performed at the site,

beyond their physical presence. He also sees the site as an important link in an eastern Mediterranean trade route to Sardinia and the west, and a gateway for the spread of Aegean materials to the centre of Sicily, via interior valleys, in exchange for minerals like sulphur, alum, or rock salt (De Miro 1996: 1000; Castellana 2002: 132; Leighton 1999: 181). The prominence of Thapsos facies material at Cannatello has led Vianello (2005: 113) to consider its foundation to be a result of the activity of peoples from the east coast of Sicily, rather than local communities in the Agrigento area. Now that Maltese and Sardinian pottery has been found on the site, however, any strict association with eastern Mediterranean maritime merchants needs to be re-evaluated. Regardless of who was responsible for the administration of Cannatello, there is a basic problem with classifying it as a maritime emporium like Thapsos: Cannatello is not a harbour site. As mentioned above, it is located approximately 1.5km inland, requiring any foreign agents to move a significant distance away from their ships if their physical presence at Cannatello is to be maintained.

Given the prominence of the thick exterior walls and interior partitions in the small wedge excavated so far, and the range of foreign materials present, I would suggest a secure storage function for Cannatello, in the hands of, and controlled by, the local population. As De Miro suggested, the eventual consumers for these foreign goods may have been the communities of the interior valleys, where the materials found at Cannatello represent goods waiting to be moved on. This fits with Leighton's (1999: 171) suggestion that Cannatello was a kind of "redistribution centre" for materials travelling to the interior, although he groups the site with Thapsos in his interpretation. At Thapsos, however, most of the recovered imported materials come from the tombs, and are therefore in their 'final' resting place. Furthermore, Thapsos' position immediately on the coast contrasts with Cannatello: the former site represents the point of introduction of foreign objects to the island, while the latter is at least one remove away from this, and more properly seems to reflect secure storage away from the docks.

3.4.2 Beyond Cannatello: Other Western Connections

Just as Thapsos represents a spike in the amount of eastern Mediterranean imports along the east coast of Sicily, Cannatello has produced much more MBA foreign material than any other site in the central or western part of the island. This discounts the "thousands" of sherds reported from Monte Grande (Vianello 2005: 135) as there has been a serious challenge to the Middle Helladic and Late Helladic I-II dates provided by the excavator. Leighton (2005: 277) in particular felt that the some of these sherds resembled Late Roman

or early Medieval pottery. Beyond Cannatello, the site that has produced the largest corpus of exotica is Monte Finestrelle di Gibellina (Trapani), where an Egyptian steatite scarab and about 70 beads of various materials (bone, glass paste, red amber) have been found (De Cesare and Gargini 1997: 372). These beads, however, may only represent two or three composite items: the amber beads are displayed as a single necklace with fifty-eight elements (Marazzi and Tusa 2001: 234). Bone is, of course, not necessarily an imported material, and the dark reddish-brown amber is likely a Sicilian product (De Cesare and Gargini 1997: 373, n. 7). After Monte Finestrelle di Gibellina, the amount of putative eastern Mediterranean data for any given central or western site falls to three: LH IIIA potsherds at Madre Chiesa (Agrigento) (Castellana and Albanese Procelli 1993-1994: 49; Castellana 2002: 122); and gold objects from a tomb at Contrada Anguilla di Ribera (Agrigento) (Panvini 1986: 114). When comparing the evidence for contact with the central and western Mediterranean, Cannatello again represents the high water mark outside of eastern Sicily. After its significant (although not enumerated) amount of Maltese and Sardinian pottery, the next largest amount of possible central and western Mediterranean material is found in the hoard from Niscemi (Caltanissetta), although the five trunnion axes recovered from this hoard may be local products (Leighton 1999: 212; Giardino 1995: 323). After that, the other sites from Agrigento, Palermo, Caltanissetta, Ragusa, or Trapani have yielded one or two objects only.

Much of the archaeological research into western Sicily has involved attempts to materially define separate 'ethnic' groups known from later historical records (e.g. Thucydides in the 5th century BC, Diodorus Siculus and Dionysius of Halicarnassus in the 1st century BC) (Albanese Procelli 2003b: 18; Tusa 2000a; 1998a; La Rosa 1989). The relationship between regional styles of local materials and corporate groups named in much later 1st millennium BC written records is not the focus of the present study, and there are no theories that directly relate extra-insular contacts with the development of distinct groups such as the Sikels, Sikans, or Elymians. At most, scholars refer to a certain conservatism in material developments in the west, and these more conservative western societies eventually developing into either Sikan or Elymian communities (but see below). The ethnogenesis of such groups, however, is not clearly displayed in the archaeological record of the MBA, and the LBA changes in the east (e.g. cremation burials, Cassibile pottery) more properly relate to the possible movement of peoples to Sicily from the mainland or the Aeolian Islands. Such a movement eventually could have led to a hybrid Sikel identity, although such a process would have mainly occurred in the Iron Age and Archaic periods, outside of the scope of the present study.

One possible ramification for this examination of extra-insular encounters, however, involves the pottery that Tusa (1999a: 650-51) commonly identifies as Elymian. This ware (figure 3.51: A-B) has impressed concentric circle motifs and anthropomorphic or zoomorphic handles (Tusa 1994: 199-200). Although it is more properly dated to the Iron Age, intriguingly, both these features are known in Nuragic pottery (figure 3.51: C-D) (Campus and Leonelli 2000: 691), and a connection to Sardinia could be proposed both on geographic grounds, as the findspot of this 'Elymian' pottery – Trapani – is the region closest to Sardinia, and based on the presence of LBA or EIA Nuragic askoid jugs (with concentric circular motifs), including one in the far west of the island at Motya (Lo Schiavo 2005f). Such decorative techniques, however, are also known in 8th – 7th centuries BC Sant'Angelo Muxaro facies ware, traditionally placed outside of the Elymian territory, and similar anthropomorphic faces are known on bronze *lamina* strips, such as that found at Monte Castellazzo di Poggioreale (Trapani) (Spatafora 1996: 161-62). It would seem, therefore, that these features in EIA pottery do not reflect any specific group of people, nor are they necessarily influenced by Sardinian contacts.

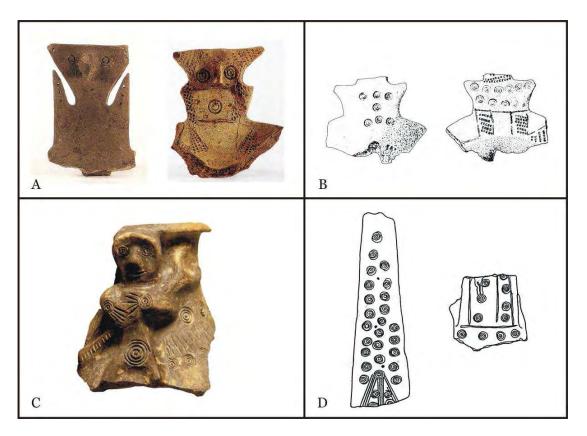


Figure 3.51: 'Elymian' pottery vs Nuragic pottery. A: anthropomorphic protome handles from Grotta Vanella near Segesta (Trapani); B: impressed circle motifs from Segesta; C: Nuragic fragment with anthropomorphic representation from Sant'Anastasia di Sàrdara (Cagliari); D: impressed circle motifs from Nuragic askos handles found in Carthage. (After Marazzi and Tusa 2001: 229, 232; Tusa 1999a: 654, fig 66; Lo Schiavo 1985a: 313, fig. 340; Lo Schiavo 2005f: 584, fig. 7.)

More recently Cultraro (2005) described LBA pottery shapes from Mokarta (Trapani) as reminiscent of Iberian late- and post-Argaric pottery in shape and dimensions (figure 3.52). Specifically, he felt that the high-footed cups and hemispherical bowls, which are found in western Sicily but not in the Pantalica North repertoire, reflected "an interesting point of contact" between Sicily and Spain during the second half of the 13th century BC (Cultraro 2005: 101). He situates such a connection, however, within a framework of Mycenaean expansion into the western Mediterranean. So, while it is refreshing to see non-eastern Mediterranean material connections proposed for Sicily, there is still a tendency to interpret such connections as dependent upon the activity of Aegean prospectors (Cultraro 2005: 104), rather than on the activities and intentions of local communities in the central and western Mediterranean. He does consider a possible mediating role of Sardinian merchants in an exchange between Spain and Sicily, although only for the end of the LBA (Cultraro 2005: 104).



Figure 3.52: Comparison of pottery shapes from (A) Mokarta (Trapani) and (B) the El Argar facies in Spain. (After Cultraro 2005: 100, fig. 3: C-D.)

While Cultraro may be correct that such vessels have no close parallels in the Pantalica North facies, it should be recalled that Tanasi (2004: 337-38) only noted twenty-two different shapes for this LBA ceramic style, which seems insufficient to represent the entire breadth of pottery for this period, and is no doubt limited by the strictly funerary contexts used to define the facies. High-footed cups are well known in the Thapsos (Leighton 1999: 173, fig. 91: 2) and Milazzese (Alberti 2008a: plate 16: 2) facies, and have also been found in large quantities at I Faraglioni (Ustica) (Holloway and Lukesh 2001: 44, fig. 5.25a). It seems just as likely that the Mokarta cups could have evolved out of these traditions. Other Iberian materials (e.g. bronze types) are not well represented in western Sicily, and are not otherwise known from Mokarta. There is only one non-eastern site, a tomb from Monte Canalotti (Caltanissetta), where a Huelva-type fibula was recovered (Panvini 2001: 497-98). On the other hand, Mokarta has produced evidence of shared

metallurgical practices with the Aeolian Islands, in the form of a mould for producing semi-lunate hilted swords, a type also found in the Lipari hoard (Albanese Procelli 2000: 77), which might indicate a more likely connection with regards to the production of the high-footed cups. For the hemispherical bowl, however, Alberti (2008: 64, plate 21: 20-22) preferred to compare the Mokarta shape with Italian mainland pots.

While it was once felt that LBA central and western Sicily remained conservative in its maintenance of the Thapsos facies culture, and thus may have reflected the beginnings of a corporate identity split with the east (Leighton 1999: 217), this has been at least somewhat qualified now by newer evidence indicating the spread of some similar Pantalica North facies pottery into the west in the later 13th century BC (Spatafora 2001: 143). The peninsular or Ausonian material incursions seen in the east, however, are still fairly uncommon in central and western Sicily (Albanese Procelli 2003b: 19, 47), where they are usually held as evidence of contact with eastern Sicily, instead of the settlement of Aeolian or peninsular peoples. This material discrepancy may indicate a separate, developing identity in the east, which would crystallise into the 8th century BC Sikel group mentioned by ancient authors in relation to Greek colonial settlements (Hodos 2000: 43; Leighton 1999: 216).

One interesting contrast in the consumption of Aegean or Cypriot pottery can be noted between eastern and central-western Sicily: while the eastern sites almost always involved burial contexts for these pots, in the west there is a mix of funerary and settlement depositions (Vianello 2005: 65; Leighton 1999: 171). In five out of eight sites in the central and western regions of Sicily Aegean or Cypriot pottery is found in settlement contexts rather than tombs. This consumption pattern is actually closer to the situation in Sardinia, southern Italy, and the Aeolian Islands, where Aegean or Cypriot pottery is never found in tombs (Vianello 2005: 52). For traditional models told from the foreign point of view, this could be interpreted as the result of interactions between locals and different eastern Mediterranean peoples for the two regions involved, such as the idea that it was Cypriots who were the exchange partners at Cannatello instead of Mycenaeans (Tusa 1999b: 179; Tanasi 2009: 52). While this may be a possible explanation for differing contextual patterns, a stress on how such material is presented to local communities in Sicily (i.e. by non-Sicilians) completely ignores any possible local motives for consumption differences, and assumes that, everything else being equal, disparate Sicilian communities would have behaved in a similar manner. Vianello (2005: 77-79), allowing for more local agency in his interpretation of these contrasting contextual situations, felt that the common shapes found

in eastern Sicily indicated pots associated with displays of wealth, while those in the west were more concerned with transport and storage, and likely reflect the importance of their contents as tradable commodities. This is a valid point in some regards, as the most common shapes in the east are painted alabastra and piriform jars, which may have represented appropriate emblems of wealth, while in the west such shapes are uncommon, and there is a preponderance of large (bulk) storage jars (Leighton 1999; Vianello 2005: 201, tables 1-2).

Now that the empirical data for cultural encounters have been presented for Sicily, the following chapter focuses on the evidence for cultural encounters in Sardinia. Such contacts are characterised by different chronological parameters, motivations for contact, materials concerned, and assumed foreign agents involved. The data presented in this chapter are re-examined in Chapter Five, where extra-insular objects are analysed from their local, Sicilian contexts to show how Aegean materials are appropriated and recontextualised to suit local needs, and how traditional material practices are not replaced but complemented. The identities of the agents of mobility are questioned, and a move away from static, binary models is advocated, with no assumption of mobile eastern Mediterranean agents bringing materials to stationary, passive Sicilians. Interpreting local agency and motivation for contact also questions the validity of labelling sites like Thapsos or Cannatello as 'Mycenaean emporia.' The importance of pre-existing networks of exchange within the central Mediterranean, as seen, for example, in the close development of metallurgy between Sicily and southern Italy, also has consequences for interpreting just how eastern Mediterranean objects entered Sicily, challenging the need for a physical Mycenaean or Cypriot presence to be read into every eastern object found. Finally, a reinterpretation of certain material forms such as so-called Aegean derivative pottery, and the central complexes at Thapsos, is offered, where these expressions are proposed as hybrid forms. While they may owe a certain inspiration to cultural encounters with foreign objects, ideas, or people, they still betray local customs and ideas, and therefore speak of negotiations between Sicilian consumers and producers. In the conclusion chapter, a more general and flexible picture is proposed, which replaces the narrow interpretation of Mycenaean acculturation with a more inclusive and dynamic scenario involving multiple agents, working at different scales.

4 Material Evidence in Sardinia

Sardinia has been characterised as being somewhat out of the stream of connections with other parts of the Mediterranean world during the Bronze Age (Patton 1996: 176), an insularity that is thought to have contributed to its unique Nuragic material culture. This isolation, however, really only applies to the island's connections to the Aegean, where there is certainly less evidence for contact than in Sicily or peninsular Italy. If the spectrum of connections is broadened, however, to include Cyprus, Sicily, Italy, the Aeolian Islands, and the western Mediterranean, it becomes clear that this idea of an isolated Sardinia during the Nuragic period has been overstated (Dyson and Rowland 2007: 79; Gallin 1989: 30).

Perhaps because of this perceived insularity, there has been less insistence upon the role of Aegean traders or artisans in the development of Nuragic society than what is often proposed for Sicily in the MBA. A key exception is the first case study presented in this chapter (4.3), Nuraghe Antigori, where a conspicuous amount of Aegean-looking pottery has led to interpretations of Mycenaean presence and activity at that site (Ferrarese Ceruti 1980). More common for Sardinia in terms of foreign influence are the proposals that posit some kind of Cypriot involvement in the development of local metallurgy (e.g. Lo Schiavo *et al.* 1985; Dyson and Rowland 2007: 76; Lo Schiavo 2005e), primarily based on the presence of copper oxhide ingots on the island, which are found in greater numbers than at any other place in the central Mediterranean. A review of the consumption and production of copper and bronze materials forms the second case study in this chapter.

Before presenting the case studies, however, it is appropriate to outline briefly the broad material traits of Nuragic Sardinia, the objects and practices that could be defined as local, while remembering that these expressions did not develop in a cultural vacuum, even if they pre-dated Middle and Late Bronze Age connections. Even labelling all Sardinian material culture as 'Nuragic' disguises existing regional variations. As Gallin (1989: 6) astutely observed, Nuragic culture should be considered "a composite of variables rather [than] a set of distinctive traits." Nevertheless, some broad generalities regarding the material culture of Sardinia are possible, and are briefly described below. In broad terms, the MBA in Sardinia can be summarised as involving continuity in ceramic traditions, but radical changes in nearly every other material facet. These include the appearance of open settlements, the replacement of cave and hypogea burials with megalithic, monumental tombs, and the appearance of the first nuraghi (A. Usai 1995: 255).

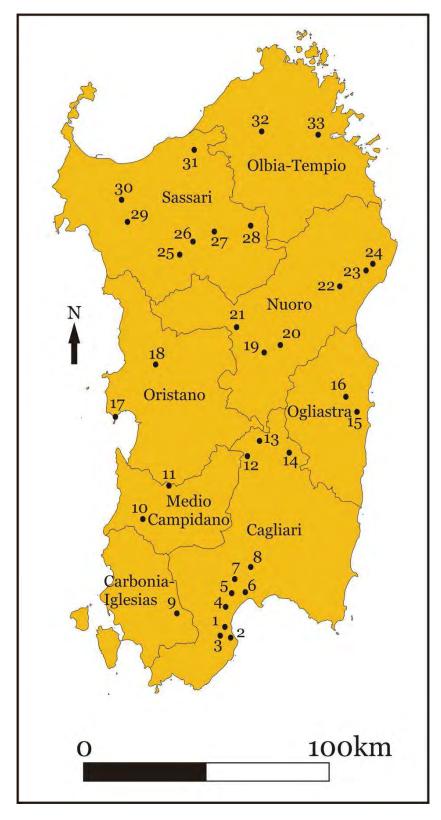


Figure 4.1: Sardinian sites mentioned in the text. 1. Antigori; 2. Domu 'e S'Orku; 3. Monte Arrubiu; 4. Capoterra; 5. Utà; 6. Assemini; 7. Mitza Purdia/Monte Sa Idda; 8. Su Fraigu; 9: Grotta Pirosu Su Benatzu; 10. San Cosimo; 11. Villanovaforru; 12. Barumini; 13. Serra Ilixi; 14. Arrubiu; 15. Perda 'e Floris; 16. Sa Carcaredda; 17. San Giovanni di Sinis; 18. Santa Cristina; 19. Abini; 20. Bidistili; 21. Ottana; 22. Sa Sedda 'e Sos Carros; 23. Galtelli; 24; Irgoli; 25. Santu Antine; 26. Funtana Janna; 27. Funtana Ittireddu; 28. Sedda Ottinnèra; 29. Santa Maria in Paulis; 30. Badde Ulumu; 31. Perfugas; 32. Nuchis; 33. Sa Testa.

4.1 Sardinia in the Middle and Late Bronze Age: A Material Overview

The most obvious place to start an overview of Sardinian Bronze Age material culture is with the nuraghi themselves. These stone towers are ubiquitous features of the island's landscape, numbering approximately seven thousand examples (Webster 1996: 91). In their developed form nuraghi involve truncated, conical towers made of blocks of dry stone placed in tapering courses, and topped by a corbelled dome (Cavanagh and Laxton 1987: 40-46; Webster 1991: 169). Many of the towers have second storeys, with stairways built into the thickness of the walls. These stairs are usually placed just inside the entrances, opposite a so-called guards room, and lead to a smaller upper room (Webster 1996: 92). In simple mono-towered structures up to three wall niches or small rooms are often found, positioned symmetrically around the large central space. While the superstructures of these towers are only partially preserved today, model nuraghi provide an indication of what some of the missing architectural features may have looked like. The nuraghi would have averaged approximately 15m in height, with the largest known (Nuraghe Santu Antine) possibly reaching 25m in elevation (Webster 1991: 169).

While there has been healthy debate on when the practice of constructing nuraghi began, it is now widely accepted that it significantly predates contact with the eastern Mediterranean, and that it is not related to any monumental architecture traditions such as Mycenaean tombs (Gallin 1989: 19). The earliest nuraghi are called protonuraghi, pseudonuraghi, or corridor nuraghi, and are dated to the Bonnanaro period (1800 –1550 BC) (Gallin 1989: 26-27). These developed into true tholos-style nuraghi, so-called because of their resemblance to the beehive-shaped subterranean tombs found in the Peloponnese. Some scholars have suggested that it is this development into tholos nuraghi that should be considered a consequence of contact with eastern Mediterranean peoples (e.g. Ugas 1992: 225), although such a notion has also been effectively dismissed by both architectural specialists (Gallin 1989: 22; Cavanagh and Laxton 1987: 39), and on chronological grounds (Blake 2001: 146; Webster 1991: 171). If any inspiration for nuraghi needs to be sought, then the dry-stone architecture of societies in the central and western Mediterranean is just as likely to have provided the impetus for innovation (Cavanagh and Laxton 1987: 45). Even within the central and western Mediterranean, however, any similarities in architectural practices are rather general, and the chronological span is quite broad (Trump 1990: 43; Kolb 2005: 171). Regardless of any extra-insular inspiration, therefore, the nuraghi should be considered a Sardinian concept executed by Sardinian architects and labourers.

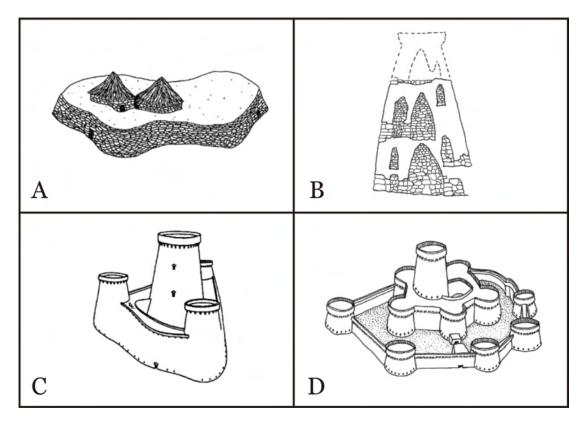


Figure 4.2: Nuraghi typology. A: proto-nuraghe; B: single tower; C: multi-tower; D: complex multi-tower (fortress). (A, B, D after Webster 1996: figs. 22b, 31, 44; C after Lilliu 1988: fig. 194).

Nuraghi sites (figure 4.2) range in complexity from simple single tower sites (by far the most common on the island), to multi-towered settlements (usually with three to five subsidiary towers), and finally to the most complex sites, where a multi-towered core is augmented by several out-buildings, and in some cases another outer wall surrounding these structures. Webster (1996: 111-17) refers to these as Class I (single tower), II (multitower) and III (multi-tower with outworks) settlements. Class III sites are not common in Sardinia, and Webster (1996: 117) includes just fourteen examples of this most complex category. At some of these sites a particular type of out-building – called a meeting hut – is found. These huts are usually large round buildings, with benches along the interior of their walls, and circular platforms in the centre. At some sites this platform is thought to have held a model of a nuraghe, though none of the four examples of model nuraghi recovered from meeting huts has actually been found in situ on the platform (Blake 1997: 155). Several other huts are often found surrounding nuraghi (of any class), where the bulk of the population are imagined to have lived. It is not possible to say what percentage of sites has evidence for this 'village,' as usually only the towers themselves have been excavated (Webster 1996: 118). There is no apparent correlation between the complexity of the nuraghe and the size of its surrounding village (Dyson and Rowland 2007: 68). Webster (1996: 125) notes that over the course of the LBA many villages were founded

independent of nuraghi complexes, which may signify the movement of some of the nuraghe's social functions to new public areas (e.g. new cult areas), or that the placement of LBA settlements was based more on economic considerations than defensive/strategic ones (A. Usai 1995: 257).

The traditional view of nuraghi development posits that some single-towered sites developed into multi-towered ones, and then a much smaller number of powerful or wealthy elites developed their multi-towered nuraghi into complex, fortress-like settlements (Lilliu 1988: 502; Webster 1991: 168). More recently, this model of development has been criticised as being too evolutionary, and a re-examination of some multi-towered and complex nuraghi (e.g. Nuraghe Arrubiu – Lo Schiavo and Sanges 1994: 55), has indicated that these sites were planned from the outset as complex compounds, rather than developments from single-towered cores (A. Usai 1995: 254). Nuraghe Antigori, given its unusual position on a high precipice, incorporating natural rocky outcrops into its defences, seems more likely to have been planned as such, rather than a single towered site that eventually developed extra buildings.

Aside from the nuraghi, two other monumental building forms are associated with the Nuragic period: giants' tombs and sacred wells. These building types are not as numerous as the nuraghi. Giants' tombs contain multiple burials, and over six hundred examples are known island-wide, dating back to the EBA (Blake 1999: 42). While they originally could have functioned as communal burial places, it is likely that by the LBA these tombs were restricted to elite usage, as the small number of tombs could no longer service the entire population (Dyson and Rowland 2007: 82; Webster 1996: 145). In form (figure 4.3) they involve long stone-lined cists, covered in earth, with a semi-circular forecourt composed of upright orthostatic slabs. The central slab (the 'giant' – Gallin 1989: 56) covering the entrance is the largest, and often has a curved stele on top. The rest of the orthostats become progressively smaller towards both ends of the semi-circle. This tomb type seems to develop out of the older allées couvertes pre-Nuragic tombs (Gallin 1989: 56); they are even described as *allées couvertes* with forecourts attached (Blake 2001: 147). Giants' tombs are always associated with a proximate Nuragic tower or village (Gallin 1989: 54). During the course of the LBA, their spatial relationship to the towers becomes stronger, and the tombs start to adopt similar architectural features to the nuraghi (Blake 1999: 47).

There is a passing resemblance between giants' tombs and the style of building called *navetas* in the Balearic Islands (Gallin 1989: 68). These *navetas* were used as both

habitations, starting at the end of the 3rd millennium BC, and later as burial monuments (albeit only on Minorca) (Ramis 2010: 65). While a possible influence between these

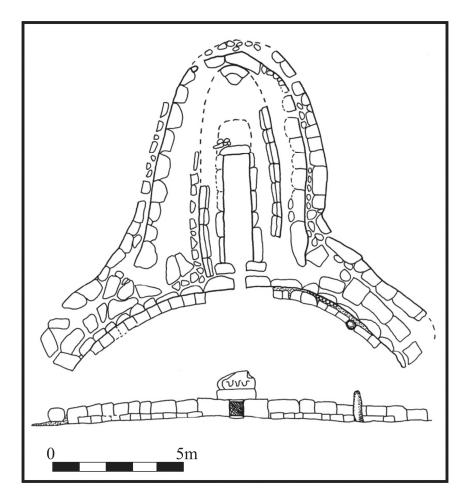


Figure 4.3: Giants' tomb at Bidistili near Fonni (Nuoro), ground plan and view of façade. (After Webster 1996: 144, fig. 57.)

western and central Mediterranean islands is an intriguing idea, apart from some vague similarities noted between pottery from a few sites in Minorca and Monte Claro and Bonnanaro facies pottery (2400 – 1650 BC) in Sardinia (Depalmas and Plantalamor Massanet 2003: 54-55), there is very little data to judge the extent of contact between them (Gallin 1989: 68). Giants' tombs are often in a poor state of preservation, and even when reasonably intact examples are found, there is very little in terms of LBA material recovered due to their later historical re-use (Gallin 1989: 56). Even skeletal remains are uncommon (Dyson and Rowland 2007: 82). As a result, foreign material is only recorded from three burial contexts (San Cosimo, Motrox 'e Bois, and Su Fraigu) in Sardinia.

The other monumental building type, this one originating in the LBA, is the sacred well (figure 4.4). Ugas (2005: 84-85) felt such sites developed first in the MBA, where there is evidence for water cults. He categorises two building types into this water-based

cult category: sacred springs, found mostly in mountainous areas, where the water rises to the surface; and sacred wells, involving significant underground construction. As mentioned above, there are not that many examples compared to the nuraghi. Webster (1996: 147) estimated about fifty sacred wells were known in 1996. While there is considerable variety in the forms such buildings take, the most monumental types usually involve a stone-lined pit, which is capped with a *tholos*-like (or nuraghe-like) covering varying between 3 – 13m in height (Dyson and Rowland 2007: 85-86). This *tholos* is

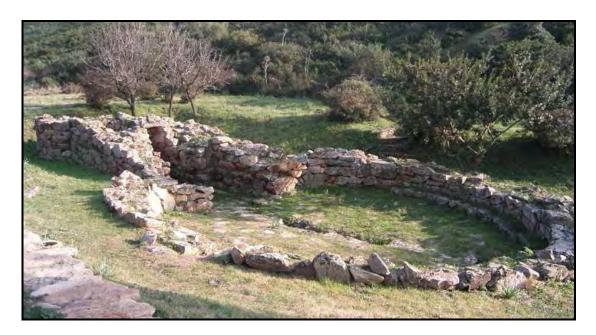


Figure 4.4: Sa Testa (Olbia-Tempio) sacred well.

sometimes subterranean, like Mycenaean *tholos* tombs, but more often is built upon level ground or into the side of a hill. As with the giants' tombs, a small forecourt is placed in front of the entrance, where ritual practises are believed to have occurred. There may also be indications of a wider festival space around the complexes, and some sites have low walls or betyl stones that appear to demark a sacred enclosure (Dyson and Rowland 2007: 85). In some sacred wells, deposits of animal bones, pottery, and votive offerings have been found, hinting at certain activities such as communal feasting (Webster 1996: 148). Many of these ritual complexes occupy liminal areas between Nuragic settlements, suggesting that they were shared between different communities. While places to make votive deposits might seem likely areas to find foreign materials, only two sites (Santa Cristina and Perda 'e Floris) have yielded extra-insular objects. Re-use and rebuilding, as well as looting, however, may be impairing our perception of standard practices at these sites.

Nuragic pottery (figure 4.5) is typically described as not very distinctive, which has no doubt hindered its identification outside of Sardinia. Even within the island, the

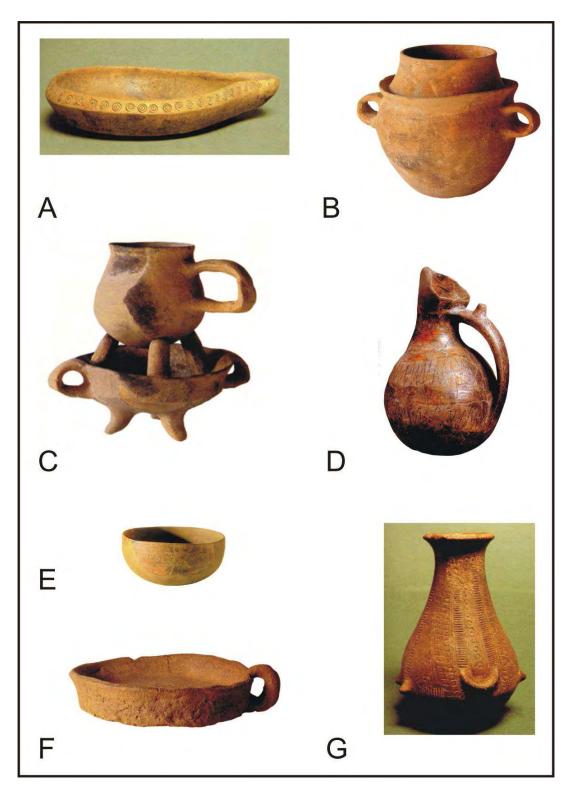


Figure 4.5: Nuragic pottery, common shapes. A: lamp; B: milk boiler; C: milk boiler in brazier; D: burnished askoid jug; E: cup; F: bread pan; G: piriform jar. (Lo Schiavo 1985a: figs. 317, 321, 323, 330, 336, 337, 342).

discovery and processing of local pottery has tended to be inadequate (Lo Schiavo 1985a: 298). It is only in the past decade that a monograph on the typology of Nuragic pottery has been published (Campus and Leonelli 2000), which attempted to describe certain geographic distributions within the island. Beyond typology and distribution, however, the study of local pottery has not yet progressed very far compared with other parts of the Mediterranean. Some general comments about Sardinian pottery during the LBA, nevertheless, are still possible. The shapes and styles tend to be very conservative (Gallin 1989: 22), a feature that has no doubt hindered any easy attempt at chronological seriation. In the LBA, there is strong continuity of practice with the preceding MBA period in all functional categories (cooking, storage, food preparation, and serving), including both flat bread pans, and vessels involved in cheese making (i.e. milk boilers and strainers) (Webster 1996: 134). The pottery is usually not decorated, and made of coarse fabrics with many inclusions (Lo Schiavo 1985a: 298). Large storage containers, carinated cups, and carinated bowls become more common in the LBA, as do spindle whorls and loomweights, indicating to Webster (1996: 135) an increase in grain storage, and an intensification of textile production, particularly textiles associated with animal husbandry. What little decoration exists is generally incised or comb-impressed, such as that found inside bread pans (Webster 1996: 134). Campus and Leonelli (2000: 691) include five classes of decoration for Nuraghic pottery: incision, impression, plastic additions, painting, and burnishing. The latter two techniques are very rare in the Bronze Age. Decorated pottery in Sardinia tends to be recovered almost always from the Nuragic complexes themselves, and not the surrounding villages, perhaps suggesting that these pots had a certain value as status markers (Webster 1996: 136).

As the production and consumption of copper represents the second case study of this chapter (section 4.4), only a brief comment about Sardinian metallurgy is included here. While much discussion has revolved around the role of Cyprus in the development of Nuragic bronze smithing, it would be a mistake to think that Sardinian metal workers were inexperienced or unskilled before the time that copper oxhide ingots were imported to (and/or produced in) Sardinia (Lo Schiavo 2008: 235). In fact, evidence for the production of copper in Sardinia dates as early as the Late Neolithic (Ozieri) period (early 4th – early 3rd millennium BC), involving complex metallurgical processes such as desulphurisation and cupellation (Giardino 1992: 304-305). To date, forty sites have provided evidence of metallurgical activity before the beginning of the MBA (Lo Schiavo 2008: 235). Weapons, tools, and jewellery are all attested during this early stage (Usai 2005: 273). Aside from finished products, evidence for metallurgical practice comes in the form of casting moulds,

slag heaps, crucibles, and tools specifically associated with metalworking (Lo Schiavo 2005c: 289, 292-94). Some of these tools bear a resemblance to LBA Cypriot metalworking instruments, and are discussed further in section 4.4.2.

There has been considerable debate on how Nuragic settlements were organised, particularly with respect to how hierarchical Sardinian society was, and what specific functions the nuraghe itself performed. Lilliu's (1988: 574-75) interpretation, still the most widespread, sees these sites as forts or fortresses. They were founded on pastoral wealth, organised into territorial cantons, involving strict social hierarchies and an innate warrior mentality. The rulers of the complex nuraghi (described as theocratic shepherd-kings) operated as absolute monarchs, similar to those in Medieval Europe, and actually lived in the nuraghe, which were built by slaves or prisoners of war (A. Usai 1995: 253-54). In feudal Europe, single, wealthy families could own several castles at the same time, and while the concept of ownership may not be appropriate to a nuraghe, it has been suggested that similar control could have been exercised over several sites simultaneously by powerful Sardinian elites (Phillips 1991: 84). It would be difficult to prove such a hypothesis materially, and of course there are no written documents from which to draw conclusions. Lilliu (1988: 576) proposed intermediate social ranks, involving lesser patriarchs (i.e. kinship group leaders from villages or smaller nuraghi), who form a kind of "council of elders." In the surrounding villages, lesser households of five to ten members have been proposed, who function independently of other similar groups, and are largely self-sufficient (Webster 1996: 126; Lilliu 1988: 365). There may be some material evidence for the existence of such family groupings in the village groundplans of wellpreserved nuraghi, in the form of conglomerations of a certain number of huts around a courtyard, which are largely closed off from the other village buildings, although these complexes may more properly date to the Iron Age (Lilliu 1988: 365; Phillips 1991: 85).

Webster's (1996: 126-28) model of Nuragic society prefers an analogy to African kraal communities, where complexes involving several huts encircle a common open work space. Just as the kraal headman would live in the largest hut, so too the Nuraghic chief would have resided in the tower (or central tower in a complex nuraghe). Sites in both systems tend to develop from the centre outward, any important ritual or civic buildings tend to be found close to the chief's residence, and the walls separating the central complexes from outside residences (or from outsiders in general) emphasise the greater importance of internal social relations over external (Webster 1996: 127-28). As with Lilliu's reconstruction, wealth was largely derived from owning livestock, although in the

kraal model there is much less emphasis on the warrior-like nature of the community, and the existence of Lilliu's aristocratic sub-class is called into question. While certain material (especially defensive) features could justify Lilliu's (1988: 576) comparison between nuraghi and Medieval European castles, excavations of nuraghi have not provided evidence of craft specialisation, professional armies, or a distinctly subordinate class of serfs or slaves (Webster 1991: 172) which would indicate a closer parallel to Medieval castle societies.

Others have also placed less emphasis on the militaristic aspects of Nuragic settlements, and posit a more egalitarian Sardinian society, particularly with regard to simple mono-towered settlements (Trump 1990: 49; Bonzani 1992: 214). Such settlements are proposed to consist of canton-based family communities of up to twenty individuals, where each kinship group erected a single towered nuraghe in both competition and cooperation with other kin groups (Trump 1990: 45). New nuraghi were built due to a process of social fission, when the kin group became too large for the current habitation, and so construction is undertaken "some distance away, but still close enough for practical communication" (Bonzani 1992: 214). In Trump's (1992: 199) reconstruction, actual social hierarchy does not exist until the development of the properly defensive fortress-like nuraghe in the Iron Age. Conversely, the earlier single-towered nuraghi would have had limited practical (i.e. militaristic) value as keeps. Trump (1990: 45) correctly points out that if the thousands of nuraghi actually reflected a state of constant warfare, it would have been impossible for the organisation to build them in the first place, as the agricultural subsistence requirements and co-operative labour must have needed substantial periods of peace and stability. Instead, he sees the single towered nuraghi as expressions of territorial control (Trump 1992: 199), and competitions of status more so than military might (Trump 1990: 45). When the proper militaristic nuraghi developed, it was likely in response to local competition over resources, rather than any perceived external threat, as the paucity of coastal fortress nuraghi indicates (Trump 1992: 201).

Almost dialectically opposed to this egalitarian model, Ugas sought parallels for the functioning of Nuragic settlements in the Aegean. He felt the Mycenaean wanax was a good analogy to the Nuragic ruler, and drew on later historical accounts that refer to a monarchical dynasty system in Sardinia (Ugas 1987: 87). He proposed direct contact between the two regions, which he felt was reflected in certain architectural developments like the change from corridor nuraghi to *tholos* nuraghi (Ugas 1992: 225). Ugas' vision of Nuragic society is similar to Lilliu's but more complex: rather than a tribal patriarchy, he

sees the settlements as proto-urban, where the nuraghe and its resident king was completely segregated from the subordinate population, and there existed intermediate social classes, including warriors and priests (A. Usai 1995: 254). This society developed out of a more equal, but still hierarchical MBA proto-Nuragic community, where the persistence of collective tombs for both king and populace, and a closer relationship between the village homes and the fortified residence indicated a greater solidarity (Ugas 2005: 241). This more egalitarian society was based on matrilineal succession, and Ugas (2005: 241-42) saw a parallel to Minoan mother-goddess worship, where the highest religious authority was not the king, but a priestess-queen.

Usai has incorporated a broader perspective to the functioning of Nuragic settlements, recognising that the towers could be simultaneously defensive, domestic, and ideological. He dismissed Ugas' Mycenaean *wanax* analogy, stating that while the complex nuraghi are impressive in their own right, they do not approach the degree of complexity of a Mycenaean citadel in terms of ornamentation, furnishings, use of space, or the employment of a system of writing (A. Usai 1995: 254). Such material differences he believed must also be echoed in the complexity of social relations. There are also sharp differences in the pervasiveness of each settlement system: in the Aegean, such citadels only developed in four places (three in the Peloponnese and one in Boeotia), whereas in Sardinia nuraghi are found in almost every region, at an average of one per 4km² (Lilliu 1988: 485). In reality, most of the Greek mainland and the Aegean islands would have had less complex systems of social organisation (A. Usai 1995: 254).

Instead, Usai (1995: 254) drew an analogy between the functioning of Nuragic settlements and the chiefdom-type of organisation that Peroni proposed for the Italian mainland. In such a model, the Nuragic ruler is less an absolute, theocratic monarch, and more a chief who must periodically negotiate his status, and is more integrated with his community. The connection between the ruler and the tower is not as direct and exclusive as in Lilliu's or Ugas' systems, and should be thought of as mediated through other symbolic significances, such as the need to seek consensus or the legitimation of power, which in such a chiefdom system is "never firm or secure" (A. Usai 1995: 257). The existence of complex nuraghi as early as the MBA somewhat dilutes the theory of Trump that hierarchical societies did not exist before the Iron Age, and Usai (1995: 256) proposes a more articulated system based on tribal power, where some control over the means of production can be exercised by the chief. Such a system of power better fits the socio-

political development of prehistoric Sardinia, where a Mycenaean-like absolute ruler would seemingly have developed out of nowhere in the MBA.

The strongest aspect of Usai's framework, however, is the flexibility and versatility he proposes for the nuraghi themselves. He suggests that the popularity and proliferation of the nuraghi must go beyond simple analyses of their practical functional potential, as such an investment in wealth, materials and labour would seem disproportionate to the material advantages of the towers (A. Usai 1995: 258). So while Trump may be correct that early and simple nuraghi would have had little practical defensive value as keeps, as a part of a system of territorial control, and as expressions of vigilant ownership, they did have a defensive function. The fact that, up to the end of the LBA, villages were always constructed near the towers is further proof of their security implications. When the villages start to become situated apart from the towers, in response to more economic than defensive needs, it is less a reflection of the loss of a defensive role for the nuraghi, as an expression of the "explosion" of the settlement system, which had to respond to more than just strategic criteria (A. Usai 1995: 257).

As for a domestic function, while Usai acknowledged the presence of domestic materials in the nuraghi complexes, he felt that they should not be strictly regarded as the abode of the chief. The internal spaces in the towers are both too confined and dark to provide much comfort (or prestige for the resident), and Webster (1991: 177) estimates an average of 34m² of interior space for most two-storey corbelled nuraghi in the Borore region. Even early in the investigation of nuraghi their practicality as homes, particularly elite dwellings, was questioned due to their spatial and lighting constraints, the low clearance of many entrances, and the lack of accommodation for smoke exhaust (Fergusson 1872: 431; Perrot and Chipiez 1890: 38). They may have been associated with other domestic functions, however, such as the storage of communal property, or the preparation of communal meals, as the presence of pottery, animal bones, hearths, and various tools testifies (A. Usai 1995: 257).

In terms of ideological value, while being able to construct a nuraghe (or giant's tomb, or even a village) may well have been a tool of social dominance for a ruler over a subordinate population, the justification for such social sacrifices would need to have reflected the tower's utility to the community at large (e.g. storage of valuable property belonging to the settlement) (A. Usai 1995: 258). As such, the towers (and later in prehistory, the tower models) may have not only represented the authority of the chief, but moreover the strength, prestige, and durability of the community. The standardisation of

the single tower form, so easily recognisable even today, further testifies to the symbolic potential of the nuraghi (Trump 1990: 45). Even the fortress-type (i.e. class III) nuraghi, which are more practically militaristic, are elaborated far beyond mere defensive expediency (A. Usai 1995: 258). Without such an ideological component to the nuraghi, the acute diffusion of this settlement type throughout Bronze Age Sardinia is unimaginable.

It could be argued that the search for a single, overarching paradigm for how Nuragic settlements functioned is inevitably a misguided one. With over seven thousand sites, occupying different ecological zones, and at different episodes of time during the Nuragic Period, any explanation of the inner workings of such a society would have to be rather flexible, and embrace variability over standardisation. Such differentiations could include the functioning of coastal versus inland sites, lowland versus upland settlements, or between sites of differing architectural elaboration or building technology (Gallin 1989: 8). In terms of common trends across all sites, it could be argued that nuraghe-based settlements were hierarchical in nature from the outset, the expression of territoriality dictated the placement of the towers, that a defensive function of some sort (refuge, territory marker, lookout, beacon) was always a consideration in their construction (Webster 1991: 172), and that inter-visibility between complexes seems to have been a requirement (Gallin 1989: 52). During periods of high occupation, competition for resources and territory would likely have been fierce. In such a competitive environment one could envision the LBA development of fortress-type nuraghi.

The present study is interested in the effects of extra-insular contact on the islander societies in Sicily and Sardinia, and in that respect, it is argued here that such contacts do not appear to have influenced the broader functioning of Nuragic society. More discrete material practices, however, could be connected to the influence of foreign peoples and the consumption of foreign goods, and from that perspective it is important to have some kind of understanding of the role of the ruling class, the functioning of the nuraghi, and the relationship between settlements. What follows is a look at broad patterns of connectivity over the course of the Middle and Late Bronze Ages, outling the kinds of extra-insular materials found in Sardinia, and briefly mentioning the few instances of Sardinian materials that have been found elsewhere in the Mediterranean.

4.2 Temporal Patterns of Connectivity and the Range of Materials Involved

As mentioned in the opening paragraph of this chapter, it would be a mistake to view Sardinia as unconnected to the rest of the Mediterranean world in any part of its prehistory, and certainly in the Bronze Age there is some evidence of culture contact from the outset. In the Eneolithic/Copper Age and Early Bronze Age (2300 – 1800 BC) such contact is represented by the so-called Beaker material that spread across much of 3rd millennium BC Europe and the western Mediterranean (Ugas 1998: 253-54; Webster 1996: 53-54; Lilliu 1988: 160). Also dating to this period are certain metal tools and weapons which have suggested more specific connections to southern France and the Polada and Rinaldone cultures of the Italian peninsula (Lilliu 1988: 299), and swords (e.g. an Iberian El Algar bronze sword), suggesting links to the west (Webster 1996: 75). Such exotic items are still quite rare, and Webster (1996: 75) is likely correct in assuming extra-insular contacts were sporadic and probably involved non-commercial transactions.

Moving to the MBA (ca. 1800 - 1300 BC) (figure 4.6), the earliest Helladic pottery found in Sardinia (at Nuraghe Arrubiu) is a LH IIIA2 (14th century BC) alabastron (figure 4.7) (Ugas 2005: 203-204). This small pot, however, is the only one dated to this phase in Sardinia, and may more properly reflect direct contact with Sicily, peninsular Italy, or the Aeolian Islands, where such material is more plentiful during the 14th century BC. It was found in a later LBA stratum in the central courtyard of the nuraghe (Re 1998: 287), possibly indicating that it was secondarily exchanged some time after its first appearance in the central Mediterranean. This may also be the case for the ivory figure fragment found at Mitza Purdia/Decimoputzu (figure 4.8), which seems to depict an Aegean style boar's tusk helmet, and has been dated to the LH IIIA/B period (14th century BC) based on Aegean comparanda (Ferrarese Ceruti et al. 1987: 12). The pottery found with it (all surface finds) represented various time periods (Ferrarese Ceruti et al. 1987: 13). Other possible imports include a Sicilian-looking bronze dagger from Su Mulinu near Villanovafranca, and two daggers in the Ottana hoard that may be either Cypriot or local copies (Webster 1996:103). These daggers have been dated to the MBA based on their association with Wessex II (Arreton Down) facies weapons (Lo Schiavo et al. 1985: 9); however, this association is not based on a shared archaeological context (see section 4.4.2). Finally, some glass beads have been found in a proto-nuraghe of $16^{th} - 15^{th}$ centuries BC date, which have been compared to examples found in Corsica, France, and England (Ugas 2005: 204). Webster (1996: 103) suggests a decline in exotica during the

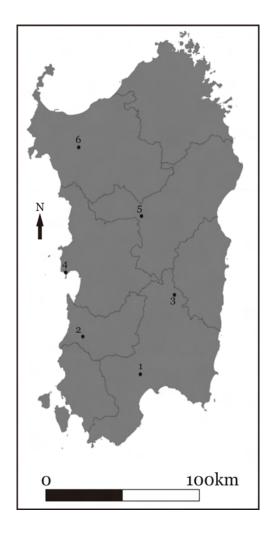


Figure 4.6: Distribution of MBA (1800 – 1300 BC) extra-insular finds in Sardinia. 1. Mitza Purdia; 2. San Cosimo; 3. Arrubiu; 4. San Giovanni di Sinis; 5. Ottana; 6. Peppe Gallu.

MBA, but since the EBA was not particularly rich in finds either, it is perhaps better to think of a continuity of low-level exchange.

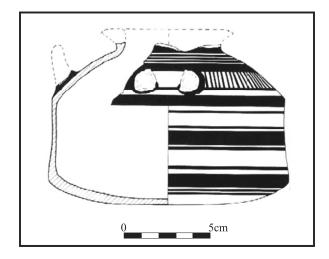


Figure 4.7: Alabastron from Arrubiu. (After Lo Schiavo and Sanges 1994: 68, fig. 43).



Figure 4.8: Ivory fragment of an Aegean-style boar's tusk helmet from Mitza Purdia. (Image source: http://www.aristeo.org/sardegnaemiti/galleria/galleria.html).

This is not the case in the Sardinian LBA (ca. 1300 – 900 BC) (figure 4.9), when contact between the eastern Mediterranean and Sardinia saw its (pre-colonial) apex. Also apparent is a connection with the western Mediterranean and Atlantic coast, particularly in metallurgy (Giardino 1995: 340). From the east, foreign pottery has been discovered at thirteen locations. Of these, however, only the approximately two hundred sherds from Nuraghi Antigori (see section 4.3.3 below) represent a significant total. The twelve sherds loosely ascribed to Orosei are the by-product of clandestine excavations, and may represent multiple sites (Ferrarese Ceruti 1997a: 269). The second highest stratigraphic total for any Sardinian site are the six sherds found at Nuraghe Domu 'e S'Orku, located close to Antigori. Most of this foreign pottery comes from the Aegean, although three sites have also yielded Cypriot pottery. The suggestion of local production has been proposed for foreign-looking pottery at seven sites. At Antigori and Domu 'e S'Orku this has been corroborated by provenience analyses (Jones and Day 1987).

Aside from pottery, eastern Mediterranean contact is indicated by the presence of copper oxhide ingots at thirty-four sites (Lo Schiavo 2005e: 317-26). There is a more recent catalogue of oxhide ingot finds in Sardinia, which is included in the bibliography (Lo Schiavo and Muhly *et al.* 2009), but was unfortunately unavailable for consultation in the present study. It is not likely to affect the analysis in any significant way. Only four whole ingots survive; the remainder (and bulk) of the evidence consists of fragments, often in utilitarian hoard contexts. These ingots are presumed to have been imported from Cyprus, based on lead isotope and trace element analyses (Stos-Gale and Gale 1992: 335). Some scholars have challenged the validity of such analyses (e.g. Budd *et al.* 1995b: 15; Knapp 2000), and more recent archaeometric results have been more ambiguous

(Begemann *et al.* 2001: 73). The production, consumption, and distribution of copper and bronze represents the second case study in this chapter (see 4.4), and these issues are explored more fully

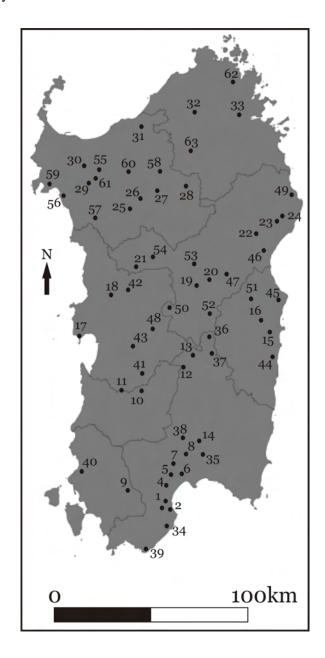


Figure 4.9: Distribution of LBA (1300 – 900 BC) extra-insular finds in Sardinia. 1. Antigori; 2. Domu 'e S'Orku; 3. Monte Arrubiu; 4. Capoterra; 5. Utà; 6. Assemini; 7. Mitza Purdia/Monte Sa Idda; 8. Su Fraigu; 9: Grotta Pirosu Su Benatzu; 10. Sant'Anastasia; 11. Villanovaforru; 12. Barumini; 13. Nuragus; 14. Monte Zara; 15. Perda 'e Floris; 16. Villagrande Strisàili; 17. San Giovanni di Sinis; 18. Santa Cristina; 19. Abini; 20. Bidistili; 21. Duos Nuraghes; 22. Sa Sedda 'e Sos Carros; 23. Galtelli; 24; Irgoli; 25. Santu Antine; 26. Funtana Janna; 27. Funtana Ittireddu; 28. Sedda Ottinnèra; 29. Santa Maria in Paulis; 30. Badde Ulumu; 31. Perfugas; 32. Nuchis; 33. Sa Testa; 34. Is Baccus; 35. S'Arenagiu; 36. Is Fossus; 37. Nurallao; 38. Giva Molas; 39. Bithia; 40.Serucci; 41. Baradili; 42. Benezziddo; 43. Motrox 'e Bois; 44. Nastasi; 45. Bau Nuraxi; 46. Serra Orios/Val del'Isalle; 47. Gremanu o Madau; 48. Samugheo; 49. Siniscola; 50. Funtana 'e Cresia; 51. Talana; 52. Ocile; 53. Sarule/Orani; 54. La Maddalena; 55. Sa Mandra 'e Sa Giua; 56. Flumenelongu/Porticciolo; 57. Grotta di Su Guanu; 58. Sant'Antioco di Bisarcio; 59.Palmavera; 60. Ploaghe; 61. Usini; 62. Albucciu; 63. San Giorgio

there. Aside from the ingots, certain finished bronzes have been compared to Cypriot examples, some of which are considered possible imports (Lo Schiavo *et al.* 1985: 22-28).

Finally, amber, glass, and faïence beads have been found at five sites, with various proposals of eastern Mediterranean sources. Two of these sites (San Cosimo near Gonnosfanadiga and Su Fràigu), both tombs, have produced significant quantities of glass and faïence beads (Re 1998: 288; Lo Schiavo 2003: 21). The source of these beads is difficult to assess. They have been compared typologically to Aeolian and Sicilian (Thapsos) examples (Ugas 1982: 182; Dyson and Rowland 2007: 98-99), and therefore may reflect trade from within the central Mediterranean. Similarly difficult to source are the few examples of amber beads, at sites like Antigori and Sa Sedda 'e Sos Carros (Oliena). While Vianello (2005: 140) posits an Aegean origin, it should be kept in mind that amber is not native to Greece (Harding 1984: 58), and there are closer sources for this material, such as the Adriatic and Sicily (Leighton 1999: 181). If it inevitably came from the Baltic region, which some archaeometric analyses have indicated (Harding 1984: 60), then it is not strictly necessary for Aegean merchants to have acted as middle-men distributors, even if amber appears in greater quantities, and earlier contexts, in the Peloponnese (Harding 1984: 68-69).

Apart from these possible eastern materials, LBA Sardinia also experiences an increase in the amount of exotica with presumed western or central Mediterranean origins. These are almost all bronze objects, particularly swords and axes, but also include razors, sickles, and fibulae, which have been found at twenty-one sites on the island. Central Italy is often believed to be a key source for such objects, with Calabria, Sicily, France and the Iberian peninsula also providing objects or influences (Giardino 1995: 295). There has been a recent shift in seeing a new *koine* of metal forms being introduced in the 13th – 12th centuries BC, whose origins lie outside of the Aegean, and whose spread into the eastern Mediterranean has been explained as either a movement of peoples or the existence of exchange networks (Jung 2009: 129). By the end of the LBA, the Atlantic west is also believed to have exchanged forms with Sardinia (Macnamara 2002: 156). Much of the bronze material is only loosely dated, and may more properly belong to the EIA. Sardinian exports are found in central Italy at that time (see below). In addition to western metal forms, Giardino (1995: 249) has suggested that the production of pottery with burnished decorations, found at several sites largely in the south of Sardinia during the FBA – EIA, is similar to decorative techniques that are common in south-western Spain in the FBA.

It is not just imports to Sardinia that provide evidence for extra-insular contact in the LBA. Some Nuragic materials have been found outside of the island, providing interesting (if still too scarce) clues to what was exchanged in return for the exotic items found in Sardinia. In the 13th century BC Nuragic pottery has been found in Crete, at the southern port site of Kommos (Watrous et al. 1998; Campus and Leonelli 2000: 108), providing at least some material basis to argue for the bi-directional nature of contact between the island and the Aegean during the LBA. Nuragic pottery was also discovered in Ausonian II (12th – 10th centuries BC) levels at Lipari (Ferrarese Ceruti 1998: 335), and more recently in the southern Sicilian site of Cannatello (Levi 2004: 237), indicating exchanges between the two large islands in the 13th – 12th centuries BC. Finally, between the end of the LBA and beginning of the EIA (10th century BC), a specific, and for once quite distinctive Nuragic vessel type, the askoid jug (figure 4.5 D), has been found in several places in the Mediterranean. These include Motya, Dessueri, and Pantalica in Sicily (Lo Schiavo 2005d: 110; Albanese Procelli 2003b: 109), in Villanovan tomb contexts in Etruria, at Carthage, at Khaniale Tekke in Crete, and two sites in southern Spain (Lo Schiavo 2003: 18-19). These vessels are found in sanctuary contexts in Sardinia, and Lo Schiavo (2003: 20) feels they reflect the exchange of a specialised container for ritualistically significant liquid, particularly for the Villanovan burial contexts. This last phase of imported pottery may more properly reflect the movements of Phoenician traders in the western Mediterranean than any specific Sardinian mobility, especially the jugs found in Spain and Carthage, although the 10th century BC is still rather early for major Phoenician forays into the west. Perhaps also related to these later ceramic imports are the pots from Trapani (western Sicily) mentioned in Chapter Three, which were classified to as Elymian ware (Tusa 1999a: 651), but whose impressed circular decorations and anthropomorphic handles resemble Nuragic practices (figure 3.51: A, B).

As for metal objects, Sardinian bronzes are known in Italian peninsular contexts in the EIA, such as the twelve votive bronze boats found at six different sites (Lo Schiavo 2000: 141). Also of possible Sardinian origin are the so-called Monte Sa Idda style flange-hilted swords (Giardino 2000: 103, table 6.1), which have been found in northern Italy, Spain, and Portugal (Giardino 1995: 197-98). Similarly, there is a slight distribution bias in favour of Sardinia for the flat axe with two lateral loops, and an incomplete example from the Monte Arrubiu hoard (Cagliari) seems to suggest Sardinian manufacture (Giardino 1995: 322). These axes have also been found in northern Spain.

Now that the general chronological distribution of foreign materials on Sardinia between 1300 – 900 BC has been outlined, a closer look at the particular consumption of exotica is examined, looking first at eastern Mediterranean pottery at Nuraghe Antigori, and then broadening the spectrum of contacts to include the entire Mediterranean through an examination of the production and consumption of copper and bronze on the island.

4.3 Nuraghe Antigori

4.3.1 Overview

Nuraghe Antigori is located in southern Sardinia, along the north-western coast of the Gulf of Cagliari. It overlooks the southern point of the Golfo degli Angeli near the town of Sarroch (figure 4.10). The Nuragic complex lies approximately 750m from the modern shoreline, on a hill that rises 177m above sea level (Lilliu 1988: 399). Along with Nuraghe Domu 'e S'Orku, situated on its own hilltop approximately four kilometres to the south, Antigori dominates the northern half of a wide crescent of coastal lowland stretching from Sarroch to Pula. From these two nuraghi, about 20km of coastline can be observed (Ferrarese Ceruti and Assorgia 1982), and from Antigori itself, most of the Bay of Cagliari. This lowland area has been partially surveyed as a part of the large archaeological investigation into the site of Nora and its territory, and thirty-six sites dating to the Middle and Late Bronze Age have been discovered, which are distributed into a systematic pattern of settlement (Rendeli 2003: 12, fig. 2; Bondì 2003: 23). This represents the area's busiest period of settlement in prehistory, and survey of the area to the north and west of Pula has revealed a further fifteen nuraghi, three giants' tombs, and five Bronze Age villages (Botto et al. 2000: 284, plate VIII).

Webster (1996: 117) categorizes Antigori as one of his class III fortress-like nuraghi, and as such, it fits within the three-levelled settlement hierarchy he proposed for southern Sardinia. This could have allowed it the potential to exploit exchange networks, via the centrally-managed movement of surpluses, by exercising stronger regional control than smaller, less complex nuraghi (Webster 1996: 139). Antigori's builders made use of its naturally defensive position, and its constructed towers were complemented by walls that were partially integrated into the rocky outcrops on the hill (L. Usai 1995: 229), in what Lilliu (1988: 399) referred to as a "bold and ingenious system of buttresses and ramparts."

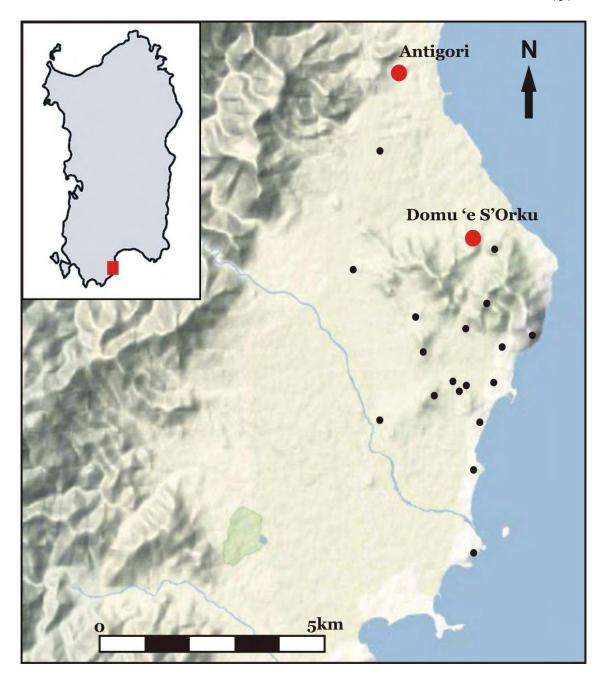


Figure 4.10: Sarroch area of Cagliari showing the location of nuraghi. Inset: location of Sarroch area in Sardinia. (Data from the Nora survey, Botto et al. 2000: 284).

The overall plan of the nuraghe (figure 4.11) can be divided into two parts: the higher eastern half, which involves five towers (B, C, F, G, and H) and Room a, rising to the northeast; and a lower section on its west side, involving several rooms that appear to be outside the circuit of the towers (Lilliu 1988: 399). These rooms (n, p, q, r, s, t) are referred to as huts by Usai (1995: 229), of which p and q appear to be the oldest. Sepulchral Cave o is also found on the western side of the nuraghe, immediately south of Room p. Other structures on the western half post-date the LBA construction of the nuraghe (see below). A village that may have been associated with the nuraghe is

described as visible on the southern slope of the hill, not far from two poorly preserved giant's tombs (Lilliu 1988: 400), but this area has not been investigated (Ferrarese Ceruti and Assorgia 1982: 171).

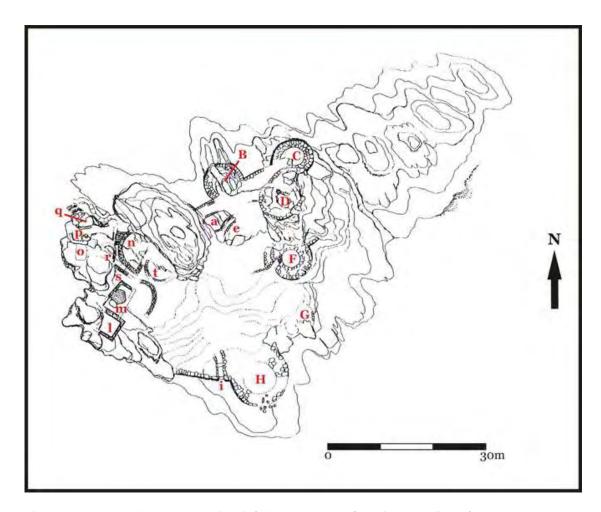


Figure 4.11: Plan of Nuraghe Antigori. (After Ferrarese Ceruti 1997c: fig. 14).

The five towers are not of uniform size or shape. They range from 9.61 (Tower H) to 6.53 (Tower F) metres in diameter, with inner spaces ranging from 6.15 (H) to 3.07 (F) metres in diameter (Lilliu 1988: 399). The restrictions of the uneven terrain no doubt contribute to this lack of uniformity. One entrance (*i*) has been found on the western side of Tower H, opening to the south slope of the hill (L. Usai 1995: 229), with a short stretch of curtain wall extending to the west (Ferrarese Ceruti and Assorgia 1982: 167). C is the best preserved tower in the complex, and involves two superimposed rooms, the lower forming a proper *tholos*-like vault of well shaped blocks (Lilliu 1988: 399) In the upper room Aegean-looking pottery was found in stratified deposits (L. Usai 1995: 229). A possible sixth tower (D) is shown on the plan of the site, but is only briefly mentioned once in published reports (Ferrarese Ceruti 1997c: 432). It lies central to Towers B, C, and F, but is not an obvious feature of the site when seen from the ground.

Despite its impressive position over the surrounding landscape, Antigori is not well preserved, and has only been partially revealed through excavation. The different towers and rooms that are labelled on the site plan are situated at various, differing elevations, and how one area relates to another is not always clear. Certain excavated areas that appear on the plan have had little to no mention in the preliminary reports. This is an especially acute problem in the western half of the nuraghe, where there is mention of certain materials recovered from rooms p, q, n and Sepulchral Cave o, (Ferrarese Ceruti 1997b; Lilliu 1988: 401) but little else. The Bronze Age landscape is difficult to imagine given the placement of oil refineries along the coast (figure 4.12), and due to their presence there is no possibility of discovering the specific landing spot(s) where ships visiting Antigori would have pulled up on shore. Even the core of the nuraghe is obscure: it seems to involve Towers B, C, and F, but there is no apparent central tower, as you would expect for a typical nuragic complex. The tower labelled D on the plan seems well placed to qualify as the main tower, but no finds from this area have been published. Furthermore, what relationship the lower Towers G and H have to this central core is obscure. They could represent a supplemental ring of defence, such as one would expect to find in a fortresslike nuraghe.



Figure 4.12: View from Tower C, Antigori.

Despite these drawbacks, Antigori possesses many features that make it an interesting site for investigating extra-insular contact and its effects on local behaviour. It is located in a convenient part of the island for traders coming from the east and south, it has been subjected to some stratigraphic excavations (Ferrarese Ceruti and Assorgia 1982; Ferrarese Ceruti 1997d; Ferrarese Ceruti 1997b), it has produced a significant quantity of Aegean-looking pottery, and a selection of this pottery has undergone physico-chemical and petrographic analyses (Jones and Day 1987). Its ceramic assemblage is unique in Sardinia in consisting of approximately two hundred sherds of Aegean, Cypriot, and Aegean-looking pottery (Ferrarese Ceruti and Assorgia 1982: 170; Ferrarese Ceruti 1997b; 1997d). This makes Antigori the only Sardinian site where it might be possible to posit some kind of prolonged or systematic contact with the eastern Mediterranean.

Those who have directly studied Antigori tend to favour the notion that the Aegean pottery found there is the result of either Mycenaean maritime merchants coming to the island (Ferrarese Ceruti and Assorgia 1982: 170), or Aegean potters, similar to the scenario presented by others to explain Aegean-looking pottery in southern Italy (e.g. Jones *et al.* 2005: 543; Loney 2007: 200). In a more extreme position, the principal excavator, Ferrarese Ceruti, proposed the unequivocal presence of Aegean residents. She based this interpretation on the rustic nature of much of the pottery, which for her indicated it was not likely a tradable commodity, but the personal possessions of stable Aegean population (Ferrarese Ceruti 1997a: 269, 272-73). Furthermore, a lead object, which Ferrarese Ceruti (1980: 392) interpreted as a votive axe, was posited as evidence for the existence of an Aegean cult area (Rowland 2001: 56). She felt Antigori could be classified as an emporium, which was "perhaps in the hands of sailors originating in the islands of the extreme eastern Mediterranean or from Cyprus" (Ferrarese Ceruti 1997a: 273).

Ferrarese Ceruti (Ferrarese Ceruti and Assorgia 1982: 171) stressed a link between Mycenaean contact at Antigori and the desire for access to metal ores, citing convenient routes from the nuraghe to metal bearing regions (e.g. Sulcis-Iglesiente). Webster (1996: 142), however, pointing out the lack of correlation between the level of complexity of Nuragic sites and the amount of trade exotica present, suggested that Antigori's conspicuous amount of imported pottery, and its overall wealthy assemblage, owes more to its location near the sea than any specific involvement in metals trade. Antigori is much closer to the sea than any other class III settlement, and as such, it could be appropriate to speak of maritime trade as a source of its wealth. Lilliu (1988: 399), however, stressed other geographic advantages for Antigori, such as the availability of timber, the presence of decent groundwater sources, and of fertile alluvial soils, all of which may have contributed to the success, and eventual wealth, of the society situated there.

4.3.2 Chronology

Ferrarese Ceruti (1997c: 432) spoke broadly of two phases of construction at Antigori. She felt the more northern structures (including Towers C and D, and rooms a, p, and q) constituted the original LBA building of the site, while the constructions in the south (Towers F, G and H, and entrance i), were of a later, but uncertain, period. There seems to have been stratigraphic excavations carried out on no less than six separate parts of the site: in Room a (Ferrarese Ceruti and Assorgia 1982: 172-76); rooms p, q, and Tower C (Ferrarese Ceruti 1997b; Relli 1995); Tower F (Ferrarese Ceruti 1997d: 403-404), and

Room n (Jones and Day 1987: 267-68). Despite this, no "satisfying stratigraphy" has been provided for the entire site (Vianello 2005: 158), and there has been no final report published. Certainly there is little information available to connect the strata of one part of the site to another. Nevertheless, some contextual information does exist for at least a selection of the exotica that have been found at Antigori, which can be connected stratigraphically to local pottery (see below).

Area and Strata	MBA	M-RBA	RBA	R-FBA	FBA	FBA-EIA	Unstated
Alea allu Stiata	1600-1300 BC	INI-KDA	1300-1150BC	K-I DA	1150-850 BC	- 730 BC	Ulistateu
	1600-1300 BC		1300-1150BC		1150-650 BC	- /30 BC	
Room a							
9-10		1	3	1	1		
Tower C							
Room above 1			1				
1	1	1	5	2	4		1
Room above 3			2				
3	1	3	7	1			2
Room above 4			4				1
4		4	19	2	1		3
4 floor		1	4				2
Tower F							
4		1	5	4	3	2	3
5		2		1	1	1	1
6		2	3	1	2		1
7			2	1	_	1	4
8		3	12		1		3
9	2	4	3	1			
	_	-	Ū				
Totals	4	22	70	14	13	4	21

Table 4.1: Chronological spread of Nuragic pottery at Antigori.

In their treatise on Nuragic pottery, Campus and Leonelli (2000: xv) remarked on the importance of Antigori in their attempt to create a relative sequence for Sardinian wares, because of the association of local pottery with the Aegean wares found there. As mentioned in the previous chapter, however, such associations are problematic, and should not be used to assign absolute dates to Sardinian contexts. An independent Sardinian chronology is still lacking (Manning 1998: 297-98). Perhaps for that reason Campus and Leonelli only use relative dating terminology. They have incorporated one hundred and forty-eight sherds of local pottery from Towers C and F, and Room *a* at Antigori into their typology, and posited relative dates for most of them. By collating this data into a table (table 4.1) broken down by area and strata, it appears that while the stratigraphies are somewhat confused, a clear bias towards activity during the LBA (called the *Bronzo recente* (RBA) for its first 150 years: 1300 – 1150 BC) can be seen. Seventy of these sherds have been strictly defined as belonging to this period, and a further thirty-six may

also date to this period, or just before or after. Indeed, in one Sardinian chronology the *Bronzo recente* II phase (1270 –1150 BC) is called the Antigori period (Ugas 2005: 12).

It should be noted that twenty-nine of the sherds that have been dated to the *Bronzo recente* at Antigori (classified as *conche* or deep bowls – Campus and Leonelli 2000: 129-32), have been assigned based on their presence at the southern Crete port of Kommos (Campus and Leonelli 2000: 108), rather than on cross-comparisons with the stratigraphies of other Nuragic sites. The Sardinian pottery at Kommos has been dated to the Late Minoan IIIA1-B period (1420 – 1200 BC) (Watrous *et al.* 1998: 337-38). One of the deep bowls at Kommos is particularly close to an example from Room *a* at Antigori (figure 4.13). The bowl from Crete is dated more narrowly to the Late Minoan IIIA2-B period (1360 – 1200 BC, Watrous 1992: 166), yielding about seventy years of overlap between Kommos and Ugas' LBA Antigori period.

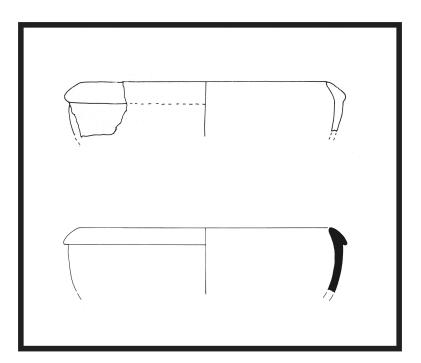


Figure 4.13: Deep bowls from Antigori (top) and Kommos (bottom). Scale 1:3. (After Ferrarese Ceruti and Assorgia 1982: plate LXII: 2 and Watrous 1992: fig. 73: 1968).

The imported Aegean pottery at Antigori has been broadly classified as belonging to the LH IIIB1-C periods (Webster 1996: 140; Vianello 2005: 215). The actual chronological spectrum may be more constricted, however, as there is some difficulty in typologically distinguishing LH IIIB from LH IIIC (Vagnetti 1999: 139-40; Blake 2008: 5, n. 13). This distinction is made even more difficult outside of the Peloponnese, where locally made Aegean-looking pottery may further deviate from the shape and motif syntax that defines such stylistic differences (and therefore chronological parameters) in the

Aegean (Jung 2010: 150). Only one of the imported sherds found at Antigori, (a single handled cup from Room n) seems to require a LH IIIC date (Ferrarese Ceruti et al. 1987: 16). This shorter period of contact may be borne out further by the stratigraphic restriction of these imports. In Room a the Late Helladic pottery is only found in Strata 9 and 10 (Ferrarese Ceruti and Assorgia 1982: 172-76). In an earlier stratum (13), about thirty pithos sherds have been recovered for a vessel thought to have had a Cypriot origin (Ferrarese Ceruti and Assorgia 1982: 170) based on its herringbone impressed decoration. A similarly decorated sherd found in a different part of the site (Room n – Ferrarese Ceruti et al. 1987: 16, fig. 2.4:4), however, seems to have been made using local clays (Jones and Day 1987: 268, sample 58). In Tower F, excluding a locally made imitation (Jones and Day 1987: 267, no. 54) the imported Late Helladic pottery has only been reported from Stratum 9. These imported sherds find their greatest stratigraphic range in Room p, appearing in Strata 3, 4, and 5 (Jones and Day 1987: 267, samples 40-42), and Cypriot wavy-banded pithos fragments were found in Stratum 7 (Ferrarese Ceruti 1997b: 440). In Tower C imported sherds are reported in Strata 3 and 4 of the upper room, the latter stratum including a fragment of what Ferrarese Ceruti (1997b: 439) called a Cypriot Base Ring wish-bone handle (contra Vagnetti 2001: 80, who classifies it as a "desurfaced" White Slip II handle). While it was grouped with other local fabrics, petrographic analysis indicates that it should not be considered of local origin (Jones and Day 1987: 259, 268, sample 74). Its Cypriot attribution, however, remains hypothetical (Vagnetti 2001: 86). Finally, in Room q Late Helladic ware appears to be restricted to Stratum 2 (Ferrarese Ceruti 1997b: 440-41).

The fine grey ware sherds (*ceramica grigia-ardesia*) discussed below have been reported in Stratum 8 of Tower F (Ferrarese Ceruti 1997d: 404), a few stray sherds in Strata 4 – 7 in the same tower (the ones from Strata 4 and 5 likely being intrusive – Giardino 1995: 46), and Strata 3 and 4 (upper room) of Tower C (Ferrarese Ceruti 1997b: 438). A peninsular Italian serpentine type fibula was found in Stratum 6 of Tower F (Ferrarese Ceruti 1997d: 406). While Ferrarese Ceruti used this fibula to date the stratum to 850 – 775 BC, only two of the nine Nuragic sherds classified by Campus and Leonelli (2000: 254, 507) could be this late. The rest of the material in this stratum seems oriented towards the LBA. As Strata 5 and 6 are quite thin in places (Ferrarese Ceruti 1997d: 409, fig. 2), it is possible the heavier fibula is intrusive from Stratum 4, which is more properly a LBA – EIA level (figure 4.14). Lilliu (1988: 401) also dated a hearth in the upper strata of Room *a* to the EIA (ca. 8th – 7th centuries BC).

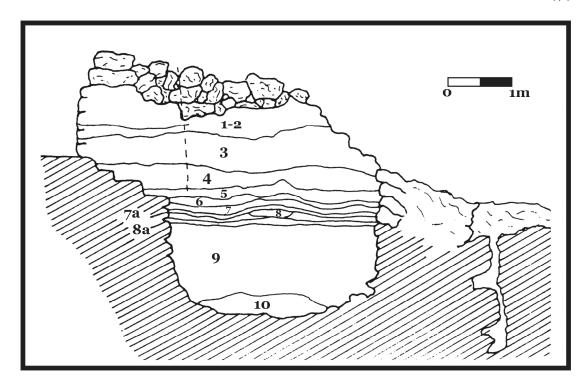


Figure 4.14: Stratigraphy of Tower F, Antigori. (After Ferrarese Ceruti 1997d: fig. 2).

A Punic or Roman-era re-use of part of the site is indicated by the presence of two rectangular rooms, *m* and *l*, which are found on the western side of the nuraghe (Ferrarese Ceruti 1997c: 432; L. Usai 1995: 230). Some of the walls of these rooms were constructed of *opus caementicium* (Ferrarese Ceruti 1997d: 406).

4.3.3 Aegean-looking Pottery

Antigori stands out from any other site in Sardinia in having produced by far the largest quantity of eastern Mediterranean pottery. The precise number of sherds found has never been published. Webster's (1996: 140) comment that "several hundred sherds" have been found at Antigori thus may be somewhat of an exaggeration. Archaeologists working at the site described Room a as having yielded approximately one hundred and sixty sherds (Ferrarese Ceruti and Assorgia 1982: 170), and mention how Stratum 9 of Tower F contained ten sherds (Ferrarese Ceruti 1997d: 404). Counting the published photos of sherds from the site's preliminary reports, allows us to add five from Tower C (Ferrarese Ceruti 1997b: 442), seven Aegean sherds and a Cypriot wavy-banded pithos in six or seven pieces from Room p (Ferrarese Ceruti 1997b: 443; Ferrarese Ceruti et al. 1987: 18, fig. 2.5), and five sherds from Room q (Ferrarese Ceruti 1997b: 443). Jones and Day (1987: 267-68) analysed a further six sherds of Aegean or Cypriot-looking pottery from Room n, two of which have published images in the same volume (Ferrarese Ceruti et al. 1987: 16,

fig 2.4, nos. 2, 4). Adding the one hundred and seventy reported sherds from Room *a* and Tower F to these other various contexts yields a total of exactly two hundred fragments.

Even though there could be unpublished sherds from these different contexts, it should be kept in mind that these totals include locally made foreign-looking pottery, which is apparently in the majority (Ferrarese Ceruti et al. 1987: 36). For the purposes of this study, therefore, two hundred sherds are offered as a rough estimate of Antigori's foreign looking pottery. Since the amount of Nuragic pottery at Antigori has never been published, it is impossible to suggest what percentage of the entire assemblage is comprised of imported and imitated ware. When pressed for an estimate, Vagnetti (Vagnetti and Jones 1988: 348) suggested that actual imports may represent only 1% of the recovered pottery, while the locally made imitations likely account for about 5-10%. Using the published total of local sherds from a contemporary nuraghe as a baseline, confirms this low percentage. At Duos Nuraghes, in the Borore region of Nuoro, 2413 sherds are recorded for the LBA1 levels (roughly parallel to the *Bronzo recente* period at Antigori) (Webster 2001: 46). If similar totals could be posited for Nuraghe Antigori, this yields an 8.29% share for the Aegean-looking pottery (including those locally made). Duos Nuraghes is a smaller complex, however, and it is entirely possible that if Antigori was more fully excavated, the percentage of Aegean-looking pottery would be much less.

A total of sixty-one sherds of from Antigori have been analysed petrographically and physico-chemically (Jones and Day 1987: 266-68). The specific samples were chosen because they did not appear to be local Nuragic sherds (Jones and Day 1987: 257-58). Of these samples, seventeen yielded results consistent with a Peloponnesian clay source, seven with Crete, one with Cyprus, and thirty-one with local Sardinian clay. In five cases the results were inconclusive. The Cypriot wavy-banded pithos, unlike the herring-bone patterned pithos described in the chronology section, did return a Cypriot provenience result. It is very similar in style to a large vessel found at Cannatello (Vagnetti 2000a: 83). As Cannatello has also produced evidence of Nuragic pottery (see Chapter Three, section 3.4.1), it is tempting to suggest that both Antigori and the southern Sicilian site were connected, at least indirectly.

The most significant result of the pottery analysis is clearly that the majority of foreign-looking pottery appears to have been made locally. Unlike the Aegean imitation ware found in southern Italy, however, where the production methods are so close to Aegean pottery practices that provenience analyses are essential for distinguishing imports from imitations (Loney 2007: 190; Jones *et al.* 2005: 543), at Antigori there was scepticism

about the origin of some of the Aegean-looking sherds even before any analyses had taken place (Jones and Day 1987: 263). The fabric colour of many of the sherds was unlike that of typical Aegean imported wares, and the painted designs seemed cruder in execution (figure 4.15). Whereas the Italian imitations seem to employ the fast wheel used in the Aegean, suggesting to some the presence of itinerant Aegean potters, at Antigori the production was either by hand or employed a very slow wheel (R. E. Jones, *pers. comm.*). The distinction is one of close imitation on the mainland, as opposed to very "approximate" manufacture at Antigori (Vagnetti and Jones 1988: 347). It is likely, therefore, that Sardinian potters were responsible for the production of imitation Aegean pottery at Antigori.



Figure 4.15: Local (left) vs. imported (right) sherds at Antigori from Room a. (Ferrarese Ceruti 1985: figs. M2, M4).

Aside from these foreign wares and local imitations, a third category of ceramics has engendered discussion of extra-insular influences at Antigori: grey ware (figure 4.16). Ferrarese Ceruti (1985: 606) refers to this pottery as *ceramica grigio-ardesia* ('slate-grey') It makes its first appearance in Sardinia during the *Bronzo recente* period (1300 – 1150 BC) (Campus and Leonelli 2000: xv). Like the grey ware pottery from the Italian mainland (usually called *ceramica grigia* or *pseudo-minia* – Vagnetti 1999: 144), it is always found at sites that have yielded both Aegean imports and locally made Aegean imitations (Ferrarese Ceruti *et al.* 1987: 36; Borgna and Càssola Guida 2005: 497; Giardino 1995: 44). There is, however, a key difference in how these grey pots were produced and consumed between these regions. On the mainland, the grey ware pots were shaped to resemble the handmade *impasto* pottery that was traditional to the area, but were prepared with better levigated clay, shaped on a wheel, and fired in such a way to produce the grey finish. At Antigori, on the other hand, the shapes reproduced were "alien" to Nuragic

pottery (Ferrarese Ceruti 1985: 606), in the excavator's mind more resembling pottery from Troy or (perhaps more telling) Scoglio del Tonno and Broglio di Trebisacce (Lo Schiavo 1985c: 6). Giardano (1995: 44, 46, fig. 20) also noted a generic similarity to both the local *impasto* shapes of southern Italy, and certain *pseudo-minia* shapes at Scoglio del Tonno.



Figure 4.16: Grey ware sherds from Antigori. (Ferrarese Ceruti 1985: fig. M12).

The exotic nature of Antigori's grey ware shapes has been somewhat qualified more recently. Campus and Leonelli (2000: 129, 184, 200, 500, 514) place at least five of the grey ware vessels into their local Nuragic typology. There are also conflicting reports as to whether the Sardinian slate-grey pots were handmade or wheelmade. Giardino (1995: 44) posited that they betray clear signs of having been turned, while Smith (1987: 99) claimed they were handmade. It is possible that they were made using the same slow wheel proposed for the local Aegean-looking pottery. In either case, these pots were made with better levigated clay, and more evenly fired than contemporary Nuragic pottery (Ferrarese Ceruti 1997a: 271). It would appear, nevertheless, that this class of pottery was being produced by different groups to suit different local needs in Sardinia and southern Italy. This should not preclude the possibility of contact and exchange between these areas,

however, and in the next chapter an examination of the consumption similarities and differences is explored (5.2.1).

When compared to the next largest cache of stratified eastern Mediterranean pottery in Sardinia – the six sherds found in nearby Nuraghe Domu 'e S'Orku (Webster 1996: 140) – Antigori's total does seem to signify a conspicuous consumption for the island. In fact, this assemblage is much larger than any found in Sicily: Cannatello has only forty-one published samples of eastern Mediterranean ware (Vianello 2005: 112), and Thapsos only thirty-nine. Even if only half of Antigori's Aegean-looking pottery is imported, this still represents over twice as much eastern Mediterranean pottery as any site in Sicily. For the Tyrrhenian region, only the acropolis at Lipari has produced more Aegean pottery (van Wijngaarden 2002: 209).

Obviously, for a ship originating in the Aegean, a greater effort would be required to sail to Sardinia than to Sicily or Lipari, which leads to the question of what drew eastern Mediterranean maritime merchants to Antigori. As mentioned above, for the excavators it was a desire for access to Sardinia's ore sources (Ferrarese Ceruti and Assorgia 1982: 171). While a valid hypothesis, there is no evidence for the production or transhipment of copper or bronze at the site itself (Muhly and Stech 1990: 205), so any intensive involvement in metals exchange networks by the elite at Antigori remains unproven. Lilliu (1988: 401) makes reference to ingots found in the contemporary sites of Capoterra and Assemini, stressing the proximity of these places to Antigori. At approximately 9 and 20km distant respectively, however, this spatial correlation is hardly secure. Eight lead objects have been found and analysed, including a miniature axe or boat (see below) and a lead clamp used to repair an Aegean-looking pot (Gale and Stos-Gale 1987: 150). All of these samples were consistent with a Sardinian isotopic field, specifically with ore sources in the Iglesiente-Sulcis area just to the west (Knapp 1990: 133). It would appear that such metal was being used for local consumption at Antigori, and not involved in long distance exchange.

The desire for metals on behalf of eastern Mediterranean merchants is a common theme in the study of culture contact in Sardinia (e.g. Lo Schiavo and Perra *et al.* 2009; Patton 1996: 172; Ferrarese Ceruti 1980: 392; Watrous *et al.* 1998: 339-40), and is discussed more fully in the second case study.

4.3.4 Other Materials at Antigori

There are a few other examples of exotica found at Antigori. The serpentine-type bronze fibula, found in Tower F (Stratum 6), resembles examples known in Calabria and Sicily (Ferrarese Ceruti 1997d: 407; Giardino 1995: 293). Lo Schiavo (1985c: 10) thought it was more likely to have come to Sardinia from Sicily, sometime around the late 9th – early 8th centuries BC. If so, then it bears no relationship to the acquisition and production of Aegean pottery or *ceramica grigia* in the LBA. As the only Aegean sherds in this tower were found in the foundation fill, the fibula may date to a period after the use of eastern Mediterranean pottery (L. Usai 1995: 229), and so it is perhaps better to think of the fibula as representative of a prolonged period of contact with the Italian peninsula or with Sicily. Also found in Tower F, Stratum 9 (i.e. the foundation fill, in the same context as the Aegean sherds), but of uncertain origin, was a small rosette-shaped object with a drilled hole in its middle (Ferrarese Ceruti 1997d: 404). Although she could find no precise comparison for such an object, Ferrarese Ceruti (1997d: 408) discounted the possibility of local production.



Figure 4.17: Lead object from Sepulchral Cave o. (Ferrarese Ceruti 1985: fig. M1).

Two amber beads were found in Room q, and a quartz bead in Room n (Vianello 2005: 158). The miniature double axe (figure 4.17) made of lead was also believed to be a foreign import by Ferrarese Ceruti (1985: 611), and she plausibly suggested it was a votive offering, as mentioned in the overview above, related to the establishment of an Aegean cult at the site (Ferrarese Ceruti 1980: 392). As lead was being used in a variety of ways by

the Nuragic residents of Antigori (Gale and Stos-Gale 1987: 150), however, any foreign associations for this miniature axe are uncertain at best. She also originally reported the axe had been found in Room a (figure 4.18) (i.e. in the same context as one hundred and sixty sherds of Aegean-looking pottery), which may have encouraged the notion that it was a foreign object. This context was later corrected, however, and the axe is now believed to have come from Sepulchral Cave o (Lilliu 1988: 401).

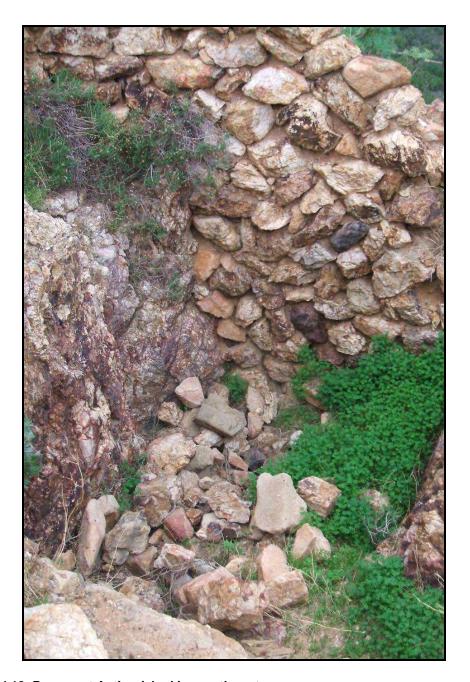


Figure 4.18: Room a at Antigori, looking northwest.

Despite Ferrarese Ceruti's (1997a) insistence upon the presence of Mycenaean residents at Antigori, Lilliu (1988: 401) has categorically rejected the notion of any stable

population of Aegean people. He pointed out that the building traditions at Antigori fall comfortably within the standard practices of Nuragic architecture, which have only a generic resemblance to the citadel fortresses of the Peloponnese. For him, the architectural traditions of Corsica and the Balearic islands are just as valid as comparanda for the building techniques at Antigori (Lilliu 1988: 401). At best, Lilliu (1988: 405-406) posits the presence of foreign workers or traders in the service of local elites, who had little effect on the structure of Nuragic society, but who could have influenced certain material changes and offered practical technical advice. Moreover, he would not rule out the possibility that such foreign objects could have been acquired at other central Mediterranean places like Lipari (where Nuragic pottery has been found), with Sardinian sailors in their own boats venturing out to exchange Sardinian products for foreign goods (Lilliu 1988: 406; Dyson and Rowland 2007: 100).

If we are to maintain that Nuraghe Antigori had direct contact with Aegean sailors travelling west, then the issue of why Aegean imports are rarely found during the LH IIIB2/C period at intervening places, like Sicily and Lipari, must be addressed. While a route along Sicily's south coast may geographically take the Aeolian Islands out of the picture, surely Sicily itself would have represented too convenient a stopping point for any Aegean merchants on the way to Sardinia (Lo Schiavo 2003: 23)? One explaination for such a distribution might be to argue that Sicily did not have the ore resources that eastern merchants sought, and was thus by-passed by eastern vessels. This only addresses the presumed final objectives of such voyages, however, and does not engage with the practical considerations of LBA exchange. Even larger, long-distance vessels must have stopped for water and provisions, and could have been delayed by unseasonably poor weather, which would have led to prolonged, unplanned stops (Broodbank 2000: 94). Any smaller tramping ships would have made numerous landings as a matter of practice. It seems unlikely, therefore, that regular, seasonal voyages of Aegean or Cypriot ships, travelling either along the south coast of Sicily, or via that island's east coast (and by the Aeolian Islands), would have left so little material evidence. The most plausible scenario is that eastern Mediterranean ships did not venture to Sardinia in the LBA, at least not in any systematic way. The Aegean materials found at Antigori more likely reflect an active connection between the site and southern Italy, the one region in the central Mediterranean that had certain contact with the east throughout the LBA (Russell 2010). There may be some material indications of such a connection, including common consumption patterns for certain types of pottery found at Antigori and southern Italy, which seem to indicate a familiarity of practice between these areas. This idea is explored further in Chapter Five.

4.4 The Production and Consumption of Copper and Bronze

As mentioned in the overview of Nuragic archaeology, it would be a mistake to think that Sardinian metalworkers were unskilled prior to any exposure to eastern Mediterranean metallurgical practices (Lo Schiavo 2008: 235). Still, certain formal and technological innovations have been noted in the Middle and Late Bronze Age that are usually associated with contact or influence with the east, particularly Cyprus. Unlike the socio-economic situation on that island, however, in Sardinia metalworking practices are perhaps best thought of as having responded to changes in social organisation, rather than being an engine of change themselves (Muhly and Stech 1990: 209). While a trade in metals is thought to have been responsible for Cypriot prosperity in the LBA, and may have been an important stimulus for social change (Stos-Gale and Gale 1994: 92; Knapp 1990: 117), this does not seem to be the case for Sardinia.

Nevertheless, metallurgy as an activity is one that seems especially susceptible to outside influence, and as such the production and consumption of bronze in Sardinia should not be considered as conservative as Nuragic pottery. This more dynamic nature of metalworking is likely a by-product of the connections it engenders. As Harding (1984: 44) noted, some of the most prolific metalworking centres, like Greece, Denmark, and Hungary, were regions that were not particularly rich in metallic ores, and would have had to import raw materials by necessity. Pottery, on the other hand, is composed of raw materials that are available nearly everywhere, and is less dependent on extra-regional interaction from a production stand point. Regardless of whether the trade in copper and bronze was the most prolific or important form of exchange during the Middle and Late Bronze Age, to practice metallurgy was to be involved in mobility networks. Ideas, skills, technologies, and perhaps metal workers themselves moved along these networks, exposing local artisans across the Mediterranean and Europe to extra-regional practices.

It is always more difficult to establish patterns in metals production, circulation, and consumption than it is for pottery in prehistory, given that only a small amount of available material survives to the present day. Such evidence is generally restricted to prestige objects (often in tombs or sanctuaries) and utilitarian hoards (Knapp 1990: 129), and therefore reflects only a small part of the actual consumption and circulation of metals in the LBA. In Sardinia this partiality is particularly acute, as there are no texts to complement the archaeological evidence, and no LBA shipwrecks have been found, unlike the situation in the eastern Mediterranean.

4.4.1 The Oxhide Ingots

The oldest and most telling elements to demonstrate the ties between Cyprus and Sardinia are still the oxhide ingots. There is no doubt, and never was, that the peculiar shape of the oxhide ingot, bearing marks or not, comes from Cyprus, and was stocked, shipped and traded along with other items and with metalworkers and their tools (Lo Schiavo 2003: 23).

Copper oxhide ingots, a well-known form in the eastern Mediterranean, have been found at thirty-four sites across Sardinia, dating to the 13th – 11th centuries BC (Lo Schiavo 2008: 236-38; Kassianidou 2001: 105). The ingots show a fairly even distribution, with perhaps a slight bias of eastern over western locations. The southwest corner of the Sardinia (i.e. the province of Carbonia – Iglesias) has not produced any oxhide ingots to date (Lo Schiavo 2008: 240, fig. 7), although this is a part of the island with significant copper ore deposits (Giardino 1995: 308).



Figure 4.19: Oxhide ingots from Serra Ilixi. (Lo Schiavo 1985a: 279, figs. 278-80).

Only seven whole ingots have been found on the island, four of which survive today: three from Serra Ilixi/Nuragus (Cagliari) (figure 4.19), and one from Nuraghe Sant'Antioco di Bisarco (Sassari) (Lo Schiavo 2008: 237). No two of these match exactly in terms of shape or size, and must reflect the products of four distinct moulds, although they are all broadly classified as examples of the Buchholz/Bass II type (Lo Schiavo 2008: 244-45; Bass *et al.* 1967: 53; Buchholz 1959: 4-6). All four surviving whole ingots also have symbols demarcated on them, either impressed into the ingots while they were still

hot, or incised at an unspecified point after cooling (Lo Schiavo 2008: 242). The Sant'Antioco ingot has a rather deep T-shaped marking, which resembles a mark seen on an ingot from Enkomi, and is placed in a similar position (Catling 1964: plate 49a). One of the Serra Ilixi ingots also has a similar deep mark, although with an extra line across the T (Sirigu 2009: 68, fig. 29). The other two Serra Ilixi ingots have shallower markings on them, which have a certain resemblance to Cypro-Minoan script (Lo Schiavo *et al.* 1985: 13; Knapp 1990: 145), adding weight to the theory that these objects should be considered Cypriot imports, although there are no exact parallels between the two islands in terms of the symbols represented.

All of the other finds – representing thirty-one of the thirty-four sites – are of oxhide ingot fragments. Usually the fragments are from different ingots, based on visual inspection, and in the case of the Sedda Ottinnèra hoard (see below), confirmed by contrasting provenience results as well (Lo Schiavo 2003: 24). Not all of the finds have secure contexts. In Lo Schiavo's (2005e: 317-26) recent catalogue, eleven findspots are certain hoards, a further six are probable hoards, nine have unknown contexts, and eight do not appear to be related to hoarding. Of this latter group, chance surface finds (usually during non-archaeology related operations) are the most common occurrence. Exactly one half of all known findspots, therefore, are probable hoards. Of these seventeen hoards, fourteen would appear to be utilitarian (merchant's or founder's) hoards, while three may have other cultural significance. These latter include: a possible foundation deposit for the whole ingots from Nuraghe Sant'Antioco di Bisarco, found below the floor of the nuraghe's central room (Lo Schiavo 2005e: 319); fragments found in a "Round Temple" votive context at Sa Carcaredda/Villagrande Strisàli (Ogliastra) (Lo Schiavo 2005e: 323); and at least eleven ingot fragments belonging to an uncertain hoard context in the sanctuary site of Abini/Teti (Nuoro).

Two hoards are described here to illustrate typical contextual scenarios for oxhide ingot fragments in Sardinia. The first, the hoard found at Sedda Ottinnèra di Pattada (Sassari), is significant not only because it contains a remarkable variety of material, but also because it has yielded three oxhide ingot fragments that might be composed of local ores. The hoard (figure 4.20) was found in a cavity on top of a granite boulder covered with earth, in an area that had the nearby remains of Nuragic period structures, including a nuraghe, some round huts, a spring (Lo Schiavo 1998: 100-101), and at a greater distance, two giants' tombs (Lo Schiavo 2005e: 321). The hoard contained seven oxhide ingot

fragments and 16 other metal objects, including bronze tools (of local and foreign type), Nuragic daggers, a decorated handle (possibly for a chisel), and the fragmentary remains of

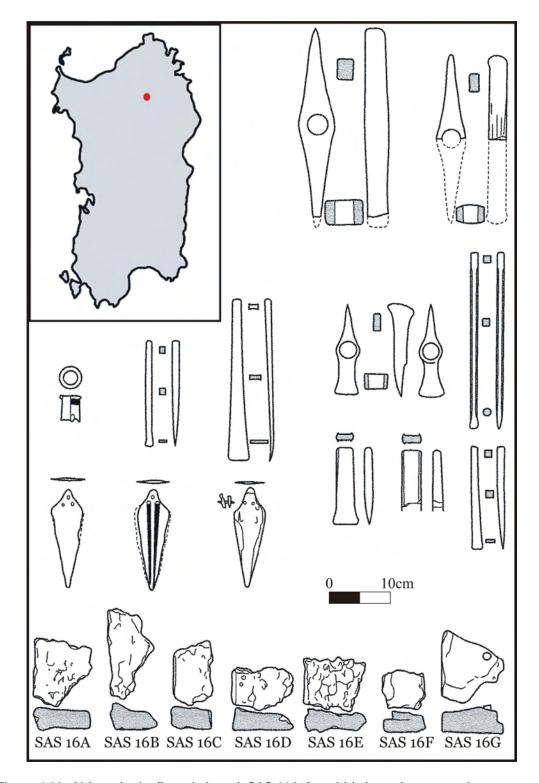


Figure 4.20: Objects in the Pattada hoard. SAS 16A-G: oxhide ingot fragments. Inset: location of Pattada. (After Begemann et al. 2001: 48, fig. 4).

a bronze vessel, which could have been a lamp or the hull of a model boat (Lo Schiavo 1998: 104; Lo Schiavo 1999: 503). The hoard is dated to the LBA, no later than the 11th

century BC, based on a comparison to similar Nuragic metal forms found in a nearby hoard at Chilivani (Lo Schiavo 1999: 504). The variety of forms in the hoard is unparalleled in Sardinia (Lo Schiavo 2005e: 320), and the mixture of Sardinian and foreign-looking tool forms with the oxhide ingot fragments would seem to indicate that such items circulated in the same exchange networks. Of the sixteen non-ingot items in the hoard, eleven appear to be whole and five broken. Given these broken objects, the fragmentary nature of the oxhide ingots, and the variety of whole objects involved, the Pattada hoard is most likely a utilitarian founders' hoard (Knapp *et al.* 1988: 237).

Of the seven oxhide fragments analysed by Lead Isotope Analysis (LIA), three (SAS-16C, SAS-16F, and SAS-16G) returned isotope ratios that are consistent with a Sardinian source field (Begemann *et al.* 2001: 57), and fell outside of the Cypriot field (figure 4. 21). These three fragments are currently the only oxhide ingots that could be interpreted as Sardinian products based on LIA (see below). There were other material differences between these fragments and typical oxhide ingots, such as their rather spongy, porous composition (noted while drilling into them), which could be indicative of poor casting by "relatively inexperienced craftsmen," who were not familiar with producing oxhide ingots (Begemann *et al.* 2001: 57).

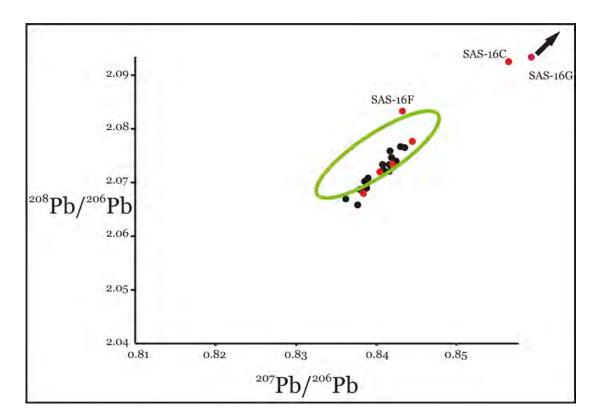


Figure 4.21: Lead isotope ratios for oxhide ingot fragments from the Pattada hoard (red dots) and Ittireddu hoard (black dots). The green oval shows the typically represented Cypriot isotope field. (Data taken from Begemann *et al.* 2001: 54, tab. 2; Pollard 2009).

Another hoard containing oxhide ingots was found near Ittireddu, also in the province of Sassari, about 50km west of Pattada. It was not a chance discovery, however, but was found during the excavation of Nuraghe Funtana (Webster 1996: 115). This hoard (figure 4.22), dated to the end of the LBA (Lo Schiavo 2005e: 320), is significant not only because it was found inside the tower complex, but also in the number of oxhide ingot fragments involved, and the fact they were hoarded together with traditional Sardinian plano-convex ('bun') ingots (Begemann et al. 2001: 47). The hoard was discovered in a large, unusual four-handled pot, in a corridor immediately outside of the central tower of this trilobate nuraghe (Galli 1991: 46, fig. 9). The pot was covered with a large bowl, and does not have any precise comparanda from Sardinia in terms of shape or size (Campus and Leonelli 1999: 514-15). Inside it there were 19.7kg of metal, including forty-four ingot fragments and five sword fragments (Begemann et al. 2001: 47). Of these forty-four fragments, nineteen were definitely from oxhide ingots, five were likely oxhide fragments, ten derived from plano-convex 'bun' ingots, and ten were too small to classify (Lo Schiavo 2005e: 320). One fragment (of uncertain oxhide or bun origin) appeared to be from a bronze ingot, and contained 11% tin (Begemann et al. 2001: 51).

Whether this cache represents a founder's hoard is uncertain. On the one hand, the ingot fragments would seem to only have value as raw materials to be used by metallurgists. On the other, its findspot within the nuraghe itself is unusual for a utilitarian hoard, and those who have studied the bronze sword fragments are certain that they represent votive offerings rather than functional weapons, based on their dimensions and alloy content (Begemann et al. 2001: 47; Lo Schiavo 2005e: 320). For another hoard (Arzachena) twelve sword fragments are identified by the same authors as votives based on low tin content, which they felt "would have made for poor weapons" (Begemann et al. 2001: 43). Of the three Funtana sword fragments for which trace element data is given (Begemann et al. 2001: 61, table 3) at least one sample (62385A) is listed as containing 7.5% tin, which could very well represent a functional weapon. There was supplemental evidence for metal working within the site, including a crucible and stone mould (Lo Schiavo 2005e: 320), and the nuraghe itself lies in a mineral-rich territory (Webster 1996: 115); therefore, it seems more likely that this hoard should be regarded as utilitarian, if not a founders' hoard outright. One of the functions that was listed for nuraghi is social storage (A. Usai 1995: 258). As such, this hoard could represent the protected property of the community.

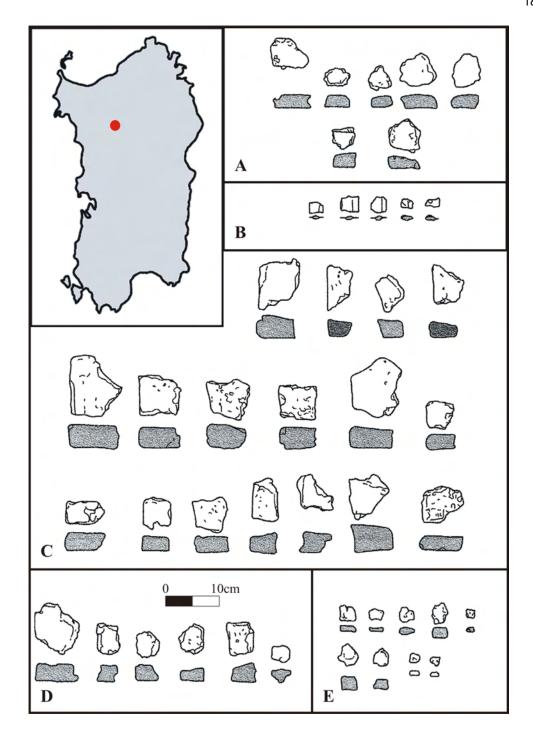


Figure 4.22: Ittireddu (Nuraghe Funtana) hoard. A: bun ingot fragments; B: sword fragments; C: oxhide ingot fragments; D: uncertain ingot source; E: uncertain object or ingot source. Inset: location of Ittireddu. (After Begemann et al. 2001: 47, fig. 3).

The twenty-four likely oxhide fragments represent the largest cache of such ingots discovered on Sardinia. While it might be tempting to suggest some kind of elite control over this type of material given the nuraghe context, it should be remembered that such a findspot is unusual. The oxhide fragments were found together with typical Sardinian bunshaped copper ingots. It would seem, therefore, that just as was the case with the Pattada hoard, the mixing of local and foreign metal forms was standard practice. Bun and oxhide

ingots would have circulated along the same networks, and would have been valued as utilitarian raw materials (Muhly and Stech 1990: 205). As oxhide ingot fragments are most often found away from the coast, this could indicate that those receiving them in interior locations only interacted with Sardinian agents, and may have had no knowledge of the ingots origins, or recognised any significance for the oxhide shape (contra Patton 1996: 173). If such ingots circulated already as fragments then it would seem logical to assume no significance could have been given to fragmentary oxhide pieces. As the Cape Gelidonya wreck's cargo shows, the circulation of scrap was occurring in the Mediterranean from at least the 13th century BC onwards, including fragments of oxhide ingots (Bass et al. 1967: 52). Given the usually poor contextual information published for hoards in Sardinia, it is difficult to know when or where oxhide ingots were broken into pieces (Budd et al. 1995a: 71-72). Even for the Ittireddu hoard, where the published context (relatively speaking) is quite good, it is not possible to state with certainty whether the oxhide ingots arrived to the site whole or in pieces. If they arrived whole and were broken up by smiths on site, we might expect some of these fragments to have come from the same ingot. Such a scenario is difficult to interpret directly from LIA or trace element analyses, although two fragments form the Ittireddu hoard (62397, 62399) do have quite similar lead isotope ratios (Begemann et al. 2001: 54, table 2).

Much of the debate concerning foreign presence or influence in the production and consumption of copper in Sardinia relates to copper oxhide ingots. More specifically, the debate has focussed around the source of the copper used in forming the ingots, and the validity of LIA as a provenience tool (Budd *et al.* 1995b; Gale and Stos-Gale 1995; Muhly 1995: Pernicka 1995; Knapp 2000). While at first the debate was waged between archaeometric results and traditional archaeological interpretations, it has developed into a division of opinion within archaeological science itself (Muhly 1995: 55). In the end, the issue appears to be: who controls the interpretive agenda? Do scientific results and the interpretations derived from them automatically invalidate archaeological ones, or should science-based analyses conform to (or at least acknowledge) the material realities and contexts of the LBA metals trade? There is also the methodological issue of how questions regarding the behaviour of society can be "translated into a geochemical research programme" (Pollard 2009: 182). Conversely, how do we take such analytical results and incorporate them into archaeological models?

In brief, as concerns Sardinia, the debate has involved the LIA and trace element results published by the Oxford Isotrace Laboratory (figure 4.23), which indicate that the

oxhide ingots found on the island should be sourced to Cyprus (Stos-Gale and Gale 1992: 331). This confirmed the earlier typological arguments of Pigorini and Buchholz, but contradicted the earliest chemical analyses that claimed these ingots to be Sardinian products, or at least not Cypriot (Balmuth and Tylecote 1976: 201; Zwicker *et al.* 1980: 141). Given that Sardinia is itself a source of copper ore, and had been exploiting native sources for some time, this long-distance importation of a more readily available local raw material appears irrational. Furthermore, chronologically speaking, since oxhide ingots do not appear to be produced, consumed, or presumably exported from Cyprus after 1150 BC (Muhly and Stech 1990: 207; Lo Schiavo 2003: 24), any later contexts for such objects as imports to Sardinia would need to be explained. Nevertheless, the Oxford research group has repeatedly claimed that all of the ingots they have analysed to date are likely composed of Cypriot copper. The only exceptions to this trend thus far have been the above mentioned three ingot fragments from the Pattada hoard analysed by the Max-Planck Institute at Heidelberg (Begemann *et al.* 2001: 57).



Figure 4.23: Typical representation of Sardinian oxhide ingots falling within a Cypriot field in terms of gold and silver concentrations. (After Stos-Gale and Gale 1992: 332, fig. 11).

Given this unusual long-distance trade scenario, it was perhaps inevitable that the validity of the Oxford research group's LIA results, and the interpretation provided by them, would be challenged by archaeologists. What may have been unexpected, however, was the contrary interpretations of these and other LIA analyses on behalf of other science-based archaeologists, who not only questioned the methodologies used by Oxford, but also their *a priori* assumptions, which allowed for a narrow interpretation of Cypriot origin. These assumptions include: the belief that the copper being used to manufacture a 30kg ingot came from a single source, with little LBA mixing or recycling of ores; the lead isotopic signature in copper and bronze artefacts (especially oxhide ingots) reflects the lead isotope concentrations from the original ore source, which is not altered during processing; and, when bronze objects are being analysed, the addition of tin does not affect the lead composition, as tin ores have virtually no lead in them (Budd *et al.* 1995b: 21; Stos-Gale and Gale 1994: 103-104).

All of these assumptions have been challenged on archaeological and analytical grounds. Archaeologically, there is uncertainty whether oxhide ingots should be considered a primary smelting product (and likely produced near the unique ore deposit that they are composed from) because of the cumbersome nature of producing such a large ingot from raw ores. This has not been replicable in modern archaeological experiments (Merkel 1986: 256), and no oxhide moulds have been found in primary smelting areas in Cyprus. In fact, the only mould recovered to date was found in a monumental 'palace' context at the Syrian port site of Ras Ibn Hani (Bass 1986: 294-95). This may suggest some kind of political control over the manufacture of the oxhide ingots, although the mould itself was not discovered in a metallurgical context, but was being re-used as a threshold stone (Lo Schiavo 2005e: 307). Another idea is that clay or stone moulds were not used typically for casting oxhide ingots, but that sand moulds were the norm, which would not be preserved archaeologically (Kassianidou 2001: 101). While this argument has been put forward to explain the lack of moulds near Cypriot ore sources, and has in fact been replicated in modern experiment (Merkel 1986: 259), it also implies that such moulds could be created and used anywhere, including Sardinia.

If secondary processing at a distance was the norm, then it would seem unusual (or at least highly coincidental) that any given ingot would represent copper inputs from a single source. That there is little mixing or recycling of ores in the LBA would similarly seem to be contradicted by archaeological evidence, including the presence of scrap metal on the Cape Gelidonya wreck (Knapp *et al.* 1988: 237), and moreover, by the presence of founder

hoards on both Cyprus and Sardinia. The Oxford research group has played down the significance of these hoards in Cyprus during their peak between 1250 – 1150 BC (Knapp et al. 1988: 233), claiming there were "less than 1000 objects in a mere 33 hoards" (Gale and Stos-Gale 1995: 34) for the one hundred year period. This appears to be an archaeologically significant number, however, given the typically fortuitous preservation of ancient metals down to the present day, and the fact that the purpose of such hoards was that they either remained hidden (i.e. for utilitarian founder's or merchant's hoards), or were in inaccessible and culturally inviolable depositions (e.g. votive hoards) (Knapp et al. 1988: 236, table 1). There is even some indirect written evidence for the practice of recycling from a group of Linear B tablets at Pylos. According to these records the four hundred bronze smiths dispersed through Messina were allotted just 4kg of bronze per year from the palace. One possible explanation for this small amount is that the bulk of the raw materials these smiths used were provided via recycled objects, and that the palatial contribution only represented a yearly 'top-up' to replace metal lost through regular processing (Halstead 1981: 333).

Aside from such archaeological challenges, there have also been analytical critiques of the Oxford research group's methods, regarding the assumption that the lead isotope signature in copper objects would actually represent the lead concentrations of a discrete ore deposit, and that such lead isotope fields are distinguishable among the various Mediterranean copper ore regions (which are of a similar geological age). In practice, there have been significant overlaps detected within the isotope ratio 'fingerprints' for discrete ore deposits in the Mediterranean, which should lead to more ambiguity when specifying a particular source (Pollard 2009: 184, 186). There is still continued insistence by the members of the Oxford research group, however, that not only are the Sardinian oxhide ingots composed of Cypriot copper, but the majority hail from a particular deposit (Apliki) (Gale 2009: 193). This has led to the accusation that the isotopic fields created by the Oxford group have been artificially narrowed by arbitrarily omitting pertinent samples as "outliers" if they broaden the fingerprint (figure 4.24), and result in ambiguous overlaps (Pollard 2009: 185).

The Oxford analyses have been independently questioned by both the Bradford Ancient Metallurgy Research Group (Budd *et al.* 1995b: 4), and the Max-Planck-Institut in Heidelberg (Pernicka 1995: 60), although the latter still cautiously support the assertion that Sardinian oxhide ingots largely derive from Cypriot copper (Begemann *et al.* 2001: 68). While accepting that lead isotope ratios could potentially reflect a source ore body,

Pollard (2009: 187) still questions the impact that the mixing of ores and recycling of metals would have on such ratios. While the Bradford research group has questioned any utility for LIA as a provenience tool (Budd *et al.* 1995b: 25), the Heidelberg team felt this to be too extreme a position, and if used as an exclusion tool (i.e. discounting certain sources as opposed to positively indicating one) LIA still has value for archaeological research (Pernicka 1995: 60-61).



Figure 4.24: Isotopic fields for Cypriot copper, and the artificially narrow field (black ellipse) as defined by the Oxford Isotrace Lab. (Pollard 2009: 185, fig. 1).

It would seem, therefore, that LIA is experiencing the same sort of growing pains that other scientific applications have undergone in archaeology (e.g. radiocarbon dating – Muhly 1995: 54-55), and it remains to be seen how practical a tool it is, even if in a reduced role. The fact that current archaeometric techniques have failed to recognise even a single object composed of mixed ores or recycled bronze (Budd *et al.* 1995b: 22; Stos-Gale and Gale 1994: 104-105) would seem to indicate their inadequacy in a LBA Mediterranean environment, where multiple sources of data seem to indicate that recycling was a regular practice. It is hard to accept the conclusions of the Oxford research group, who chose to believe that such mixing and recycling was uncommon, rather than consider any problems with their method.

Assuming that a Cypriot – or at least non-Sardinian – origin for these ingots is correct, there have been several attempts to explain such an irrational exchange pattern, although none have met with much consensus. Arguments claiming that Cypriot copper

was somehow purer have met with little consensus, and the proposition that Sardinian metallurgists needed more copper than what LBA Sardinian mines were yielding is practically impossible to prove archaeologically (Begemann et al. 2001: 59; Stos-Gale and Gale 1992: 320-21). It has been suggested that the actual amount of copper ore present in Sardinia has been overestimated, and is certainly not of the same magnitude as Cyprus (Bartoloni 2009: 11). While this would address the issue of the need to import more copper, it is again difficult to prove archaeologically, as it involves not only how much copper geologically existed in LBA Sardinia, but also how many deposits were known and exploited at that time, and what level of local demand was. Another proposal is that Cypriot copper in Sardinia should not be seen as the result of enterprising Sardinians wishing to import this material, but rather is due to a Cypriot "speculative venture" to increase the market for its copper (Stos-Gale and Gale 1992: 336). Such a venture could have been related to the fact that Cyprus' own market, and that of its more immediate neighbours, was rapidly being re-oriented towards the production and consumption of iron between the 12th – 10th centuries BC, while during the same period the demand and consumption of copper continued unabated in Sardinia and the central Mediterranean (Knapp 1990: 151). It is not archaeologically certain how much surplus copper Cyprus produced in the LBA (Stos-Gale and Gale 1994: 93), and any motivation for such a venture is itself speculative. The suggestion that Sardinia was an important stopping point for tin ores travelling west (perhaps even a source of tin itself), or was just a convenient landing station for Cypriot traders on their way to the west (Lo Schiavo 2008: 242), while logical as a possible motivation for contact on behalf of Cypriot entrepreneurs, is difficult to prove (Muhly and Stech 1990: 209), and does not engage with local motivations or responses to contact. Finally, the suggestion has been made that oxhide ingots represented giftexchange transactions (Kassianidou 2001: 108) between Cyprus and Sardinia. While this does seem to circumvent any irrationality in the exchange, it is based on a comparison with written documents from the eastern Mediterranean. It seems unlikely that the ruler of Cyprus/Alashiya would have had a similar kind of 'brother-son' relationship with any Sardinian elites (Liverani 1987: 66-67; Knapp 2008: 335; Eder and Jung 2005: 485). Inevitably, all of these proposals require the direct interaction of Cypriots and Sardinians, usually envisioned as Cypriot merchants, metallurgists, or prospectors within the central Mediterranean.

How irrational is the presence of non-Sardinian copper, however, in LBA contexts on the island? While the 'coals to Newcastle' scenario has been continually held up (e.g. Kassianidou 2001; Knapp 1990: 144) to illustrate the illogicality of the exchange, any

presumed irrationality exists only if viewed from an island-wide perspective. Yes, Sardinia is an island relatively rich in copper, and would not have needed to import more of this metal to satisfy island production or consumption in the LBA. Unlike the situation in Cyprus and other places in the eastern Mediterranean, however, there is no person or body that held centralised, island-wide, political or economic control in LBA Sardinia (Knapp 1990: 137, 149). No individual held any broad control over either imports or exports to and from the island. There is also no Cypriot-style settlement hierarchy related to the extraction and processing of copper (Knapp 2008: 138-42), from which we could infer even a regional level of control. Metallurgy in Sardinia seems to be largely a local affair, practised to satisfy local needs (Webster 1996: 137).

If looked at from the perspective of discrete, autonomous transactions that take place at certain ports-of-call around Sardinia, there is nothing necessarily irrational about the possible presence of foreign copper. A ship, originating from anywhere (perhaps even another part of Sardinia), landing at a Sardinian port, with a cargo hold full of goods that included oxhide ingots or fragments thereof, would require water, food, other materials (e.g. timber for ship repairs), anchorage (Lo Schiavo 2003: 28), and perhaps temporary shelter for its crew. In exchange for such needs, these maritime merchants would have had the goods in their cargo hold. It seems unlikely that a local authority negotiating on behalf of the port, or even perhaps for a nearby Nuragic leader, would turn down a perfectly useful and tradable commodity such as raw copper (Kassianidou 2001: 101), especially if such material could be more easily acquired by boat than from interior island sources. From this local, discrete transaction perspective, the actual source of the copper – if it is known at all by the participants in the transaction – is immaterial. It only matters that such material could be exchanged for goods and services (Begemann et al. 2001: 59), both between ship and port, and then within Sardinian interior networks. The archaeological distribution of oxhide ingot fragments indicates that such a material commonly circulated to inland areas. Such a scenario not only has the advantage of overcoming any 'coals to Newcastle' irrationality, but it also does not insist upon any direct connection to Cyprus, or demand the presence of Cypriot ships, sailors, or metallurgists in the central Mediterranean.

Given the rather pragmatic context for many of the oxhide fragments found on Sardinia, often grouped together in pots with other whole or fragmentary tools, it would appear that regardless of origin, in Sardinia such objects were regarded as useful raw materials, rather than special objects which had a non-intrinsic value (Begemann *et al.*)

2001: 67). There are only a few contexts, briefly described above, where a non-utilitarian deposit may be interpreted, but even in those instances the interpretation is hardly secure. While a special significance for oxhide ingots would address the irrationality of imported copper, it does appear to be refuted by the general lack of special contexts for the ingots. There is certainly nothing to compare to the ideological messages conveyed by such objects as the 'Ingot God' from Enkomi, or the miniature votive oxhide ingots found in Cyprus (Knapp 1986: 42).

4.4.2 Beyond the Bull: Non-Oxhide Ingot Related 'Cypriot' Materials

Aside from the oxhide ingots, other objects have been argued as corroborating evidence for the close relationship between Sardinia and Cyprus in the LBA. These supplementary data include pottery, weapons, tripod stands, figurines, a cylinder seal, and most significantly, metallurgical tools (Knapp 1990: 145; Lo Schiavo *et al.* 1985: 22-28). Such artefacts include hammers, tongs, and shovels, and represent a significant cache of evidence, as only Cyprus itself has yielded more metallurgical tools (Harding 2000: 222-23; 1984: 130). A closer look at the specific artefacts, however, reveals certain contextual and interpretive problems.

The evidence for Cypriot-looking smithing tools (figure 4.25) in Sardinia specifically involves: three hammers (one rising hammer and two sledgehammers); three charcoal shovels and a shovel mould; and seven pairs of tongs (Lo Schiavo 2005c: 294). Of these items, none of the hammers or shovels has an archaeological context recorded. Four of the seven tongs have published contextual information, although one (from Badde Ulumu in Sassari) was a chance find (Lo Schiavo et al. 1985: 25). Obviously, without a datable context for many of these objects, any association with a potential LBA Cypriot or eastern Mediterranean presence must be made strictly on typological grounds. Although these tools share a northern Sardinian distributional bias with the oxhide ingots, none of them has been found in context with such ingots. Therefore, if one was to posit the presence of itinerant Cypriot smiths in Sardinia based on the presence of these few tools, such agents operated independently of the circulation of oxhide ingots. In fact, only one oxhide ingot hoard in Sardinia has included finished objects that are considered to indicate some kind of a connection to Cyprus. These are the double axes and adze-axes found in the Pattada hoard, which Lo Schiavo (1998: 101; Lo Schiavo et al. 1985: 18, 20) compares to examples from Enkomi, although LIA indicates they were likely made in Sardinia (Begemann et al. 2001: 70, table 4). To explain this, Lo Schiavo (2005e: 320) speaks

vaguely about Cypriot "inspiration," and of production "under general Cypriot influence but without direct imitation" (Lo Schiavo 1998: 101).

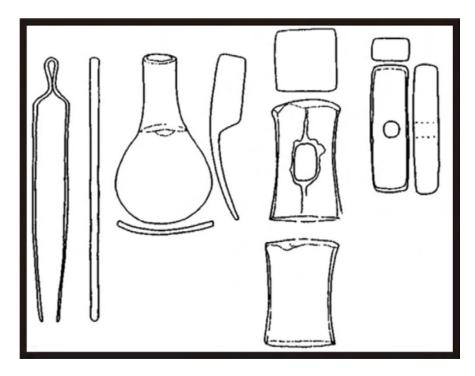


Figure 4.25: Cypriot-style smithing tools in Sardinia. (L to r): tongs, charcoal shovel, sledgehammer, raising hammer. (Lo Schiavo 2005e: 313).

Beyond the uncertain contexts, there are other interpretational problems with assuming a Cypriot connection for these tools. The Cypriot charcoal shovels used for comparanda have twisted handles, looped terminals resembling bird heads, and rectangular blades (Catling 1964: 100, plate 10: c-e). One of the three Sardinian charcoal shovels (figure 4.26: C), from the Nuragic village of Sa Sedda 'e Sos Carros (Nuoro), could be a local product (Begemann et al. 2001: 73), which Lo Schiavo (2003: 25) again feels is an indication of Sardinians copying Cypriot forms. The shovel is in fact quite fragmentary, and any resemblance to complete Cypriot types is conjectural. The closest Sardinian comparanda to Cypriot shovels is the nearly whole example from Oristano (figure 4.26: A) (Lo Schiavo 2005c: 294), although this comes from a private collection, and has no contextual information. The charcoal shovel from an unknown context in Sulcis (Lo Schiavo et al. 1985: 27) looks nothing like the Cypriot prototypes, having a clearly circular blade (figure 4.25, second from left), and is in fact compared to full-sized agricultural shovels in Cyprus (Catling 1964: 78, plate 3). The steatite mould found in Irgoli (figure 4.26: B) is approximately the right dimensions, but as it is only a mould it is impossible to say whether the completed shovels would have been finished with such Cypriot-like features as the twisted handle, or bird-headed terminal.

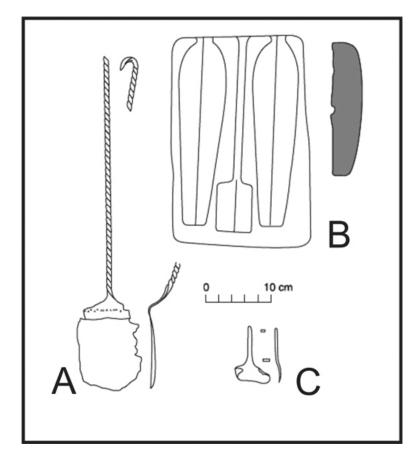


Figure 4.26: Charcoal shovels. A: Oristano; B: mould from Orgoli; C: fragment from Sa Sedda 'e Sos Carros. (Begemann *et al.* 2001: 50, fig. 6).

The tongs from Sardinia are similar, if slightly smaller (Lo Schiavo *et al.* 1985: 23-24) than their Cypriot counterparts. It could be argued that tongs have functional, straightforward shapes that do not engender much formal variety. The fact that they are compared more generically to 'Levantine' types than strictly Cypriot ones (Lo Schiavo *et al.* 1985: 25) is no doubt a reflection of this generic nature. The raising hammer from Perfugas (Lo Schiavo 2005c: 294) is compared to just one known Cypriot example from the Enkomi hoard (Catling 1964: 100); therefore, from a distribution point of view, the latter could just as plausibly be called a Sardinian tool in Cyprus. Regarding the sledgehammers, the formal similarity between Cypriot and Sardinian examples is said to be the round shaft-hole, which is distinct from Aegean, Sicilian, or peninsular Italian hammers which have oval, square, or rectangular holes (Lo Schiavo *et al.* 1985: 22). While examples from the Enkomi and Mathiati hoards in Cyprus do indeed display clearly round shaft-holes (Catling 1964: 99-100, pl. 11: a, b), the two sledgehammers from Sardinia have oval (unknown context) and rectangular (Nuchis) shaft-holes respectively, and are described as such (Lo Schiavo *et al.* 1985: 22, fig. 7: 6,7).

These metallurgical tools are thought to represent compelling evidence for Cypriot presence in Sardinia because they indicate a transfer of specific eastern technology to the island, and therefore, the presence of Cypriot metallurgists. Furthermore, because the specific forms these implements take are not found in any intervening places (i.e. the Greek mainland, Crete, peninsular Italy, Sicily, or Lipari) (Stos-Gale and Gale 1992: 322), this has been taken as evidence of direct Cypriot involvement in Sardinian metallurgy, not mediated through secondary exchange agents. An alternative theory for the absence of such tools in intermediate locations is that those societies did not participate in primary metals production, and would not have need of heavy foundry equipment (Knapp 1990: 137). Furthermore, it is difficult to assume the presence of specific agents in situations of technology transfer when technologies commonly cross cultural boundaries (Knapp 2008: 107). When the only expressions of this transfer are the formal features of finished products, it is difficult to see how local bronze smiths would have needed the presence of Cypriot artisans rather than simply exposure to the finished products themselves.

Beyond smithing tools, a few finished bronze objects from Sardinia have been described as betraying Cypriot affinities. These include two hook-tanged daggers from Ottana (Vianello 2005: 142) which resemble Cypriot 'rat-tail' tang weapons (Catling 1964: 56-59, fig. 12), although with enough formal differences to suggest that the Sardinian examples were locally-made imitations (Lo Schiavo 1985c: 7), with Sardinian smiths drawing influence from both Cyprus and the Atlantic west (Lo Schiavo 1980: 354-55). Based on their association with 'hole-tanged' weapons of the Wessex II (Arreton Down) facies, Lo Schiavo (Lo Schiavo et al. 1985: 9) favoured a MBA (15th – 14th centuries BC) date, hence "the most ancient proof of relationships between Cyprus and Sardinia." This association, however, is not based on a shared archaeological context, but rather on the fact this cache of weapons was acquired by the Soprintendenza of Sassari at the same time from an unknown central Sardinian location (Lo Schiavo 2005a: 206). It is unreasonable, therefore, to date the hook-tanged daggers based on any contextual connection to the Wessex-style weapons. A Cypriot-looking fibula was found in an Iron Age context at Barumini, although it has affinities with both Sicilian and Iberian prototypes as well (Macnamara 2002: 158). A curious set of seven incomplete axes, with the flashing left from casting still on the blades, was found in a hoard near Nuraghe Monte Arrubiu (Cagliari), which also contained Iberian and Atlantic axe/palstave forms (Albanese Procelli 2000: 83). Although the incomplete nature of these objects has suggested local manufacture, their shape has been compared to Cypriot flat axes (Lo Schiavo 1985a: 322-23, fig. 359, right). Such an assignment is not secure, however, as similar flat axes with

lateral spikes are also known from both peninsular Italian contexts (Carancini 1984: 235, plate 172: 4486-87), and, as presented in Chapter Three, from Sicily as well (Albanese Procelli 2000: 81, fig. 5), where a set of moulds for this type found at Sabucina indicates local production. Giardino (1995: 323), calling them trunnion axes, still felt they were inevitably derived from eastern Mediterranean prototypes, although he credits Sicily with their spread within the central Mediterranean. Any Cypriot connection for such axes in Sardinia, therefore, is questionable.

Two final bronze forms from Sardinia that have been held up as further proof of a Cypriot connection are figurines and miniature tripod stands. Of the former, there are two examples: a fragmentary piece from Galtelli (Nuoro), and a seated figure from Paulilatino (Cagliari) (Lo Schiavo et al. 1985: 54-55, fig. 16). The piece from Galtelli was not found in a securely dated context, and may have been associated with LBA or EIA materials. Although only the upper torso and most of the arms survive, it is thought to be possibly Cypriot due to the similarity of pose with the Horned God figure from Enkomi (Lo Schiavo et al. 1985: 54; Catling 1964: pl. 46). While the pose is certainly similar, the piece from Cyprus is sculpted to a much larger scale, being over 50cm in height (Catling 1964: 255). Its torso measures approximately 10cm, compared to 1.9cm for the Sardinian fragment. The seated figure from Paulilatino, found at the sacred well site of Santa Cristina, is usually described as being of Syro-Palestinian style (Barreca 1985: 405), and is related by some authors to early Phoenician interest in Sardinia, around 1000 BC (Barreca 1986: 131; Lo Schiavo et al. 1985: 55). It has been compared to other seated bronze figures from Cyprus, though, which are themselves thought to be Phoenician-influenced. It is notable that the Sardinian figure is described as female (Barreca 1986: 134), while the comparanda from Cyprus are male (Catling 1964: 253, pl. 45: d, e), and none of the Cypriot examples wears the same twisted torque. Miniature tripod stands are represented by three examples, two of which – the object from the Santa Maria in Paulis (Sassari) hoard and that from the cave site of Pirosu di Su Benatzu (Carbonia-Iglesias) – are considered to be Sardinian imitations of the much better represented Cypriot form (Lo Schiavo et al. 1985: 42; Ridgway 1986: 174). Only the fragmentary example from a private collection in Oristano (with no provenance) is thought to be an actual import due to its close resemblance to Cypriot comparanda (Catling 1964: plates 27-29), although again on a smaller scale.

Beyond bronze and copper, there is some ceramic evidence for a Cypriot connection to Sardinia, including: a small amount of pottery from Antigori (mentioned above); "some"

sherds from San Giovanni di Sinis / Tharros (Oristano) (Vianello 2005: 165), although all but one is now considered to be of much later date (Re 1998: 287); and a wishbone handle found along the road in San Sperate (Cagliari), although this may be both post-LBA and of local manufacture (Lo Schiavo 2003: 16). Finally, a carved green olivine cylinder seal was found in a tomb at Su Fràigu nearby San Sperate, which may be Near Eastern or Cypriot (Ugas 1987: 85; Lo Schiavo 2003: 20-21).

Adding up all of this supplementary – and ambiguous – evidence for contact with Cyprus yields the following totals: thirteen smithing tools; one mould for a charcoal shovel; fifteen other bronze tools, weapons, or figures; three sites with an unspecified (but very small) amount of Cypriot pottery; and one cylinder seal. Of these objects, only nine have published archaeological contexts. This is a problematic body of data to complement the oxhide ingots, and would seem to call into question the characterisation of LBA Sardinia as "so incredibly rich in LCII/LCIII elements and connections" (Lo Schiavo 2001: 134).

4.4.3 Broadening the Picture: Sardinia and the West

Regardless of what we think of as the specific relationship between LBA Sardinia and Cyprus, it was not the only metallurgical connection for the island. Other areas, including the Iberian Peninsula, the Italian mainland, Sicily, France, and even the Atlantic coast (i.e. Portugal, northern France, Britain, and Ireland) all betray evidence of contact with the Sardinia during the LBA. The evidence includes both western Mediterranean-looking finished bronzes found in Sardinian contexts, and some Sardinian forms found in extrainsular locations in the central and western Mediterranean.

The main treatise is Giardino's (1995) study of bronze object connections, routes, and their chronologies for the western Mediterranean. He adequately demonstrated that such contacts did exist, and that along with the spread of eastern Mediterranean objects into the central Mediterranean, there is a complementary diffusion of an Atlantic and western Mediterranean *koine* of metal forms into the central Mediterranean, which reaches its peak during the LBA – EIA (Giardino 1995: 340-41). He also hypothesised that the few eastern Mediterranean materials found in the far west are not a sign of direct eastern presence, but "are rather elements which have been filtered and mediated through the indigenous cultures" of Sicily and Sardinia (Giardino 1995: 340). For Giardino, these islands are not merely convenient stopping points for eastern ships, but actively engage in shipping routes themselves.

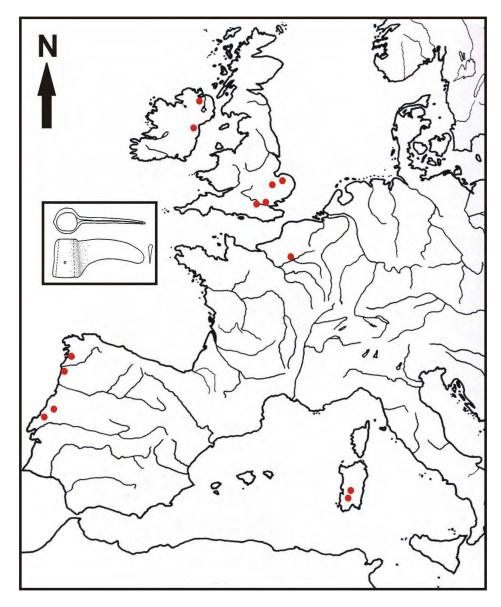


Figure 4.27: Socketed sickle distribution in the western Mediterranean. Inset: sickle from Forraxi Nioi (Nuoro). (After Giardino 1995: fig. 116).

There are nineteen sites on Sardinia where bronze objects betray some sort of a connection to the central or western Mediterranean, or the Atlantic. If we exclude oxhide ingots and only focus on finished objects, this is actually one more site than those that have produced evidence for eastern Mediterranean forms. The evidence of finished bronze objects, however, is not without interpretational problems. Giardino's methodology, never explicitly laid out, involves creating distribution maps for discrete forms, and then assigning a source region based on where the particular form is best represented. While such a method may work for pottery, where many thousands of sherds provides a higher degree of resolution and confidence to any regional assignments, with the drastically more circumscribed bronze evidence, too often a source is assumed based on only a slight distributional bias. This is the case with the laterally-socketed sickle, which Giardino

(1995: 236, 329) reports from thirteen contexts in Sardinia, France, Britain, Ireland, and the Atlantic coast of Iberia, and arbitrarily assigns to Britain (Giardino 2000: 103, table 6.1). There are nine examples from a hoard in Baiões, Portugal (Ruíz-Gálvez Priego 1997: 103-104, fig. 9.4: 42-50), however, that are missing from his distribution map (figure 4.27), which would seem to challenge a British source. At other times, when the evidence is too scant or the distribution betrays no clear bias, Giardino only postulates the existence of a connection, without attempting to identify the source or direction of exchange (see Giardino 2000: 103, table 6.1, where he refrains from assigning a possible origin for five forms).

Even when there seems to be a clearer distributional bias, however, the source claimed by Giardino may reflect at most the origin of the shape and its associated technology, but not the specific object itself. This may be the case for the twin-looped socketed axe found in the Funtana Janna/Bonnanaro hoard (Lo Schiavo 1985a: fig. 297), where the distribution pattern seems to indicate a Portuguese/Atlantic coast origin for the shape (figure 4.28), but where the results of LIA and trace element analyses for the axe

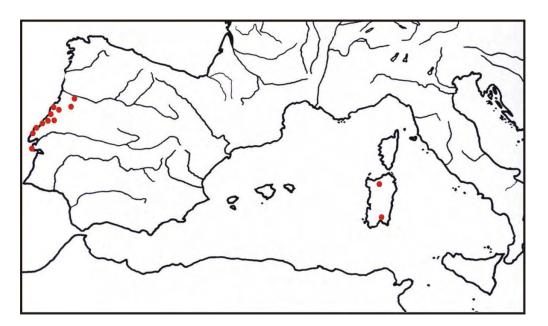


Figure 4.28: Distribution of twin-looped socketed axes. (After Giardino 1995: 221, fig. 106: A).

were consistent with a Sardinian ore source (Begemann *et al.* 2001: 72-73). For Lo Schiavo (2003: 25), as with the evidence of Cypriot forms being made in Sardinia, this attests to "a long standing deep familiarity and cultural osmosis, rather than material exchange."

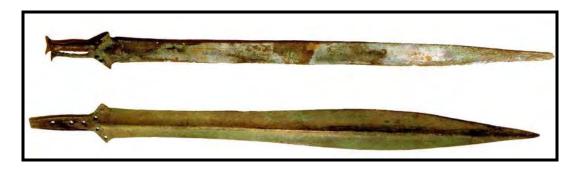


Figure 4.29: Imported swords in Sardinia. Top: carp's tongue sword (Huelva variety) from Siniscola (Nuoro); bottom: leaf-shaped sword from Oroè, near Siniscola. (Lo Schiavo 1985a: figs. 351, 352).

Nevertheless, a few objects found on Sardinia are more likely to be imports from the west. This is the case for the Vénat-type 'carp's tongue' sword found in the Monte Sa Idda hoard (Giardino 1992: 308), whose distribution strongly favours a French Atlantic origin (Cunliffe 2001: 280-81). This hoard also contained an articulated spit, which may be a French Atlantic import as well (Macnamara 2002: 156-57). A second carp's tongue sword (figure 4.29, top), with no known circumstances of its discovery, was seized by the authorities at Siniscola (Nuoro) (Lo Schiavo 2005b: 212). There is also an indirect piece of evidence for contact with the Iberian peninsula in the form of a Nuragic bronzetti warrior figure from Uta (figure 4.30) that holds a western Mediterranean pistilliforme or foglia (leaf-shaped) sword (Lo Schiavo 2003: 26). This type of 11th century BC sword is also known from one full-sized example in Sardinia, again from Siniscola (figure 4.29, bottom) (Lo Schiavo 2003: 25-26), although not a part of the seized materials mentioned above. The Nuragic bronze smith responsible for making the figure, therefore, could have seen such weapons first-hand in Sardinia. It is also formally similar to 12th century BC Ballintober swords from Ireland (Eogan 1965: 7), also found in Britain and France (Colquhoun and Burgess 1988: 21).

Just as Sardinia itself is sometimes envisioned as a meeting place for eastern merchants seeking access to western Mediterranean ores (Lo Schiavo 2003: 28; Ruíz-Gálvez Priego 1997: 98), the Iberian Peninsula has been characterised as a meeting point between Mediterranean societies and those from the Atlantic (Ruíz-Gálvez Priego 1997: 95). Predictably, this relationship is characterised as one of eastern agents (now representing most of the Mediterranean) seeking raw materials from the west, usually tin, which can be found in the Iberian Peninsula and southern Britain (Harding 1984: 56). Tin, which is required to make tin-bronzes, has long been a puzzle for Mediterranean archaeologists, who have proposed several areas as possible sources at different times

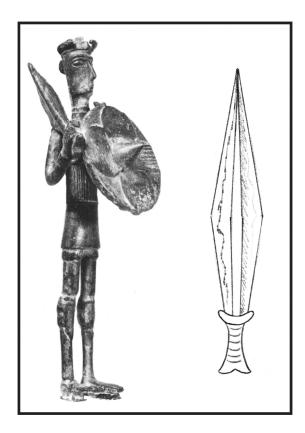


Figure 4.30: Bronzetti figure from Uta (Cagliari) holding a leaf-shaped sword, and detailed drawing of the sword. (After Demontis 2005: 42-43).

during the Bronze Age (e.g. Muhly 1985; Valera *et al.* 2005). While Sardinia is itself a modest source of tin ores, it is uncertain whether these were exploited during the LBA (Gale and Stos-Gale 1988: 382) Its importance in the pursuit of western tin has been characterised as one of geographic convenience, rather than as a supplier of the raw material in its own right (Ruíz-Gálvez Priego 1997: 110).

This opens the question of how involved Sardinians were in this network. As mentioned in Chapter Two, taking part in extra-regional exchange does not necessarily mean being involved in shipping (Gillis 1995: 61). On the one hand, there is very limited evidence for Sardinian exports in the west with which to corroborate the notion of Sardinian ships actively venturing to Iberia, the Balearics, or France. On the other hand, the notion that Sardinia was a convenient stopping point for eastern Mediterranean merchants on their way further west is equally confounded by the small amount of Aegean or Cypriot material in the western Mediterranean. Given the variety of imports and influences detected in Sardinian assemblages, it is tempting to see the island as a kind of 'clearing house,' even if we do not necessarily posit the presence of people from every region represented in the island's archaeological record.

In both the case studies presented above some common themes are detected in the interpretation of foreign objects and influences in Sardinia. One of the dominant trends is a consistent insistence on the systematic, physical presence of Aegean or Cypriot agents. Any discussion of the Sardinian response to contact, or the role of locals in any exchange scenario begins from the assumption that they dealt directly with foreign peoples in Sardinia. In this direct cultural encounter, Sardinia is represented as either a source of raw materials, as a middleman that imported materials from further west for eastern merchants, or as a staging post for ships continuing on to the west. In the latter scenario, a site like Antigori might be interpreted as a re-victualling station, with the presence of foreign copper elsewhere on the island representing what these Cypriot or Aegean crews exchanged in return for goods that allowed them to continue their journey. In none of these models is much credence or credit given to the potential of Sardinian maritime merchants to actively bring in foreign materials, either from long distances (e.g. Kommos), or from closer, mid-range areas (e.g. Cannatello, Lipari). More often debates are structured around determining which foreign group (Mycenaeans, Cypriots, etc.) was controlling trade routes to the central Mediterranean (e.g. Rowland 2001: 58; Ferrarese Ceruti 1997a: 273). The ships themselves are granted ethnic, or at least corporate, statuses, with culturally homogenous crews, and in the service of eastern polities, who set the prospection agenda, and have clear 'foreign policy' aims (Stos-Gale and Gale 1992: 321).

That said, there is still much less insistence on the ability of foreign contacts to affect the broader functioning of Nuragic society than what we have seen in Sicily, where contact with the eastern Mediterranean societies is credited with developing social hierarchy, urbanisation, complexity, and modifying important social practices (e.g. burials). While certain analogies for the functioning of both island societies have been sought in the Aegean (e.g. the Anaktoron as seat of the wanax of Pantalica (Bernabò Brea 1957: 163), and Ugas' (2005: 241-42) model of Nuragic communities developing from motherworshipping, Minoan-style societies to patriarchal, warrior-king ones), in Sardinia these comparisons have been given much less credence. In both Sicily and Sardinia, however, a discourse of certainty, where interpretations of direct contact are not only reported as facts, but as unchallengeable facts, has developed in response to the very few alternative models of contact that have been proposed (Harding 1984; Blake 2008). This is coupled with a discourse of 'Aegean-ness,' where the labelling of objects and practices with terms appropriate to Bronze Age Greece (e.g. tholos-nuraghe, megaron temple) has the effect of downplaying local innovation, and emphasising foreign influence. An examination of these discursive tendencies is explored further in Chapter Six.

Now that the data representing connections for both Sicily and Sardinia have been presented, the next chapter provides a new analysis of the evidence, following the theoretical positions outlined in Chapter Two. Specifically relevant to this chapter are an examination of the amounts of data from a chronological perspective (especially Aegean pottery – see 5.1), a critical re-evaluation of the assumption of Cypriot presence and activity on Sardinia (5.1.2), and a re-assessment of the contact situation at Antigori based on shared patterns of ceramic consumption with southern Italy (5.2.1).

5 Discussion

In this chapter the theoretical positions outlined in Chapter Two are applied to the archaeological data presented in Chapters Three and Four, contrasting the consumption-based approach advocated here with the more typical emphasis placed on the spread of eastern Mediterranean materials, influences, and peoples as an indication of foreign agents and foreign interests. In the first section I evaluate extra-insular evidence in its Sicilian or Sardinian archaeological context, to show how it is too insignificant a corpus of data to have engendered the widespread changes in islander communities with which it has been credited. This consumption-based analysis also shows how the way such objects and influences were used and manipulated by locals indicates that they were not trying to become more Mycenaean or Cypriot. The second section deals with the issue of how foreign materials were spread throughout the central Mediterranean, challenging the dominant binary paradigm of locals dealing directly with foreign agents. Finally, in the third section, an attempt is made to provide some interpretive weight to foreign objects and influences at discrete places of contact, replacing the acculturation framework with the concepts of hybrid production and hybrid practice.

The methodology advocated here (i.e. consumption, moving away from binary models of contact, hybridisation) has been directly derived from post-colonial studies of the ancient Mediterranean, particularly those that have dealt with interpreting the colonial entanglements between both Phoenician and Greek colonists in the central and western Mediterranean (van Dommelen 2002; 2005; 1998; Hodos 2006; Dietler 2005). These methods, however, which foreground the local situation, also work well with the cultural encounters described in this investigation. In fact, they would seem to be more appropriate for these pre-colonial encounters, when local materials, practices, and peoples represent the bulk of the evidence. Using foreign materials strictly as an indication of foreign activity, when such objects are consistently only a small part of any site's assemblage, is an illogical method for interpreting the data (Knapp 2008: 1). This is the most typical way that eastern Mediterranean materials have been treated, however, in studies of cultural encounters in Sicily and Sardinia for the Middle and Late Bronze Age.

5.1 The Consumption of Foreign Materials by Local Societies

Looking at materials from the local perspective helps to place foreign objects, practices, and influences into quantitative perspective, as well as into local systems of value and meaning. Counting foreign materials against local ones is often impossible for Sicily and

Sardinia, however, as few MBA or LBA sites have had final publications, and local materials are often not quantified. They are the background noise against which the slim minority of foreign objects are highlighted. This is certainly true for the three principal sites discussed in the two previous chapters: Thapsos, Cannatello, and Antigori. If it is impossible to weigh the number of imports against the consumption of local materials, however, they can still be subjected to a chronological-quantitative analysis to illustrate how small an amount of foreign material has been recovered for the centuries involved. Following the method adopted by Manning and Hulin (2005) for putting Aegean materials into temporal-spatial perspective in the LBA eastern Mediterranean (Cyprus, the Levant, and the two shipwrecks), the first step in foregrounding the local is, therefore, re-assessing the potential impact of exotica in Sicily and Sardinia. Using Cline's (1994) totals of one thousand one hundred and eighteen Aegean objects in the eastern Mediterranean, Manning and Hulin (2005: 283) demonstrated that even this seemingly significant corpus of data is fairly moderate given a six hundred year time span, yielding an average of less than 1.9 objects per year. Even this total is misleading, as 25% of the data is represented by the two "instantaneous" shipwrecks, meaning that for the rest of the region these six centuries are represented by only 1.4 objects per year (Manning and Hulin 2005: 283). This total itself homogenises the LBA, however, as the first three hundred years are represented by a mere 0.5 objects per year.

When applying this type of analysis to the Sicilian and Sardinian data, a similar constriction is evident. Ignoring the problematic early Monte Grande evidence, and treating the instances of multiple bead finds (whose totals in the vague hundreds probably reflect single items of jewellery with twenty to thirty elements each), as composite objects, there are approximately one hundred and eighty-six objects for Sicily and four hundred and seventy-eight objects for Sardinia that are assumed to be imports from the eastern Mediterranean. These items fall within a timeframe of about 1450 – 900 BC, yielding an average of 1.2 imported objects per year for these two islands. This total reflects all objects classified as extra-insular on Sicily or Sardinia, regardless of the provenience confidence score, and includes the instances of locally made Aegean-looking pottery, which are never published as separate totals. It also counts all of the copper oxhide ingot fragments as foreign. Clearly for some sites, like Thapsos, Cannatello, and Siracusa in Sicily, or Antigori in Sardinia, there may have been much more material that has since disappeared through environmental decay, human interference, or site re-use. In the case of Cannatello and Antigori, there may also be data that have yet to be discovered due to the partial excavation of these sites. We are further hampered by a complete lack of complementary

textual information, such as that provided by elite correspondence in the eastern Mediterranean. Even if we assumed an improbably high one-hundredfold increase to compensate for lost data from these islands (i.e. presuming that the remaining evidence counts for only 1% of actual totals of imports), this still only yields an average of one hundred and twenty imports per year: thity-three for Sicily and eighty-seven for Sardinia.

A tighter chronological span could be proposed by concentrating on Aegean pottery, for which we have the Late Helladic absolute dates to provide a rough guideline (table 5.1). In Sicily, for example, the bulk of the Aegean ware dates to the LH IIIA1-B period, or roughly 1450 – 1200 BC (Dickinson 1994: 19). For this two hundred and fifty year span there are a total of one hundred and two Aegean or Cypriot sherds or whole pots at sixteen sites, or an average of 0.4 pots imported per year during this, the *busiest* moment of prehistory in Sicily in terms of eastern Mediterranean imports. Again, assuming only 1% preservation (which may be extremely generous for sites that are not Thapsos, Cannatello, or Siracusa), there would be an average of about foty-one imported pots to the island per year, or 2.5 per site. In Sardinia the bulk of Aegean pottery dates to the LH IIIB-C period (1300 – 1050 BC), and there are two hundred and thirty-nine sherds or pots recovered from thirteen sites. This yields 0.96 pots imported per year. It should be remembered that two hundred of these sherds come from a single site (Antigori), and most of the Aegean-looking pottery found there was locally made. There is not as much insistence

Island	Dates Involved	Sherd or pot totals	Sherds or pots per year	Sites	Sherds/pots per year per site (assuming 1% preservation)
Sicily	250 years (1450 - 1200)	102	0.408	16	2.55
Sardinia	250 years (1300 - 1050)	239	0.956	13	7.354
Sardinia (w/out Antigori)	250 years (1300 - 1050)	39	0.156	12	1.3

Table 5.1: Aegean pottery in Sicily and Sardinia from a chronological perspective.

placed upon the importance of Aegean contacts in Sardinia as there is in Sicily, however, and it is Cyprus (as represented by the oxhide ingots) that has been held up as the key foreign contact in the LBA. While there is detailed data regarding the amount of ingots recovered from Sardinia, as almost all of the data consists of fragments, it is difficult to know how many whole ingots are indicated. This is also an issue for potsherds, although sherds can be classified into different shapes, and there are statistical methods for

estimating whole pot totals, such as a minimum number of individuals (MNI) analysis (Jung 2010: 146). The oxhide ingots have less formal variety, making it more difficult to establish the relationship between the number of fragments and the number of whole ingots represented. Another problem is dating the ingot fragments. Some of the data comes from later Iron Age hoards (i.e. long after Cyprus stopped producing oxhide ingots – Lo Schiavo 2003: 24), indicating that these items (if Cypriot) had been in circulation for some time before their final deposition. As a tentative exercise, assuming the approximately one hundred and ninety finds of ingots and fragments represent one hundred and ninety separate ingots, and that the chronological span of their import to Sardinia is restricted to a single century, 1300 - 1200 BC, this yields 1.9 ingots per year. As has been pointed out, however, this total is less than what a large ship's hold could carry, making it physically possible (if not logical) for all of the ingot data, or even all MBA and LBA exotica in general, to represent a single large shipment to the island (Webster 1996: 142).

If this temporal-spatial analysis is narrowed to just one particularly 'busy' site, Thapsos (table 5.2), the totals are thirty-nine pots for the one hundred and fifty year period of LH IIIA2-B, or 0.26 pots per year. Keep in mind, however, that Thapsos has evidence for occupation that spans from the $15^{th} - 10^{th}$ centuries BC. Even assuming a two hundred year occupational gap, these thirty-nine pots, together with seven metal objects (with uncertain provenience assignments) represent the 'Mycenaean penetration' of Thapsos over the course of three hundred years. Adding in an estimate of seventeen sundry jewellery items helps to bolster the total of imports, although these have as uncertain eastern proveniences as the bronze objects. Even so, adding all of these possible eastern items within the limited chronological scope represented by the use of the necropolis (where all of these items except for the oxhide ingot fragment were found) of 1450 - 1250 BC by Alberti's (2007) chronology, yields just over 0.3 imports per year. Assuming 1% preservation, which may not be unreasonable for a harbour site like Thapsos, yields just 31.5 objects per year for this presumed Mycenaean emporium.

Object type	Amount	Per year for LH IIIA2-B (150 years)	Per year for necropolis use (200 years)	Assuming 1% preservation for 200 years
Pottery	39	0.26	0.195	19.5
Bronzes	7	0.047	0.035	3.5
Sundry	17	0.113	0.085	8.5
Total	63	0.42	0.315	31.5

Table 5.2: Thapsos exotica from a chronological perspective.

As this quick quantification exercise shows, there are many assumptions and statistical manipulations that need to occur before the eastern Mediterranean data can in any way be argued to have a potentially transformative role in Sicily or Sardinia. While it may be fair to assume that the surviving data represents only the tip of the iceberg of what was actually present in the Bronze Age, we do not know how representative this tip is of the now missing whole. How secure are acculturation paradigms or grand narratives of contact and influence based on such a small corpus of surviving data? If it is difficult to construct any regional or island-specific models of contact, then moving to an analysis of how such materials were appropriated and adapted at a particular site may lend some interpretive weight to these extra-insular objects. Rather than assume some broad and illdefined process of 'Mycenaeanisation,' for which it would be necessary to propose equally tentative reasons why such a process would be attractive to local societies in the central Mediterranean, a look at specific instances of the consumption of foreign materials in local contexts may help to illustrate a more limited material impact on the functioning of specific communities in Sicily and Sardinia, as well as their intentions in appropriating foreign objects and ideas.

5.1.1 Foreign Pottery Consumption at Thapsos and Antigori

As detailed in the Thapsos case study (section 3.3), foreign pottery at Thapsos is represented by Aegean imports, a few Cypriot-looking pots, and Maltese pottery of the Borg-in-Nadur and Bahrija facies. The Aegean and Cypriot pottery, aside from an uncertain small amount of unpublished sherds, is found only in the tombs. The Maltese pottery, on the other hand, is found in both tomb and settlement contexts. This would seem to indicate that while the eastern Mediterranean pottery was considered only appropriate for specialist funerary use at Thapsos, the Maltese ware had a broader spectrum of usage. Such broader usage might indicate more regular contact with Maltese agents, and a greater familiarity with the range of practices associated with Maltese pottery, making it appropriate for both domestic (or at least 'living') and funerary use. In both contexts a similar range of table and serving shapes are found, including dipper cups, pouring jugs, and two-handled deep bowls (Tanasi 2008: 34-40).

There is no detectable status difference between the use and display of Aegean or Maltese pottery in the tombs, and five tombs (1, 27, 64, D, and E) contain both wares. It would seem that their status as imports was the important prestige element, rather than any specific region of origin (van Wijngaarden 2002: 236). Tanasi (2008: 77-79) considers the Maltese pottery in the tombs to reflect either gifts exchanged or perhaps the personal

property of Maltese merchants living (and dying) in Sicily. On balance, an exchanged item seems more likely given that local Sicilian items are the most plentiful find in any tomb. He also felt that Maltese traders maintained contacts with Sicily in order to have access to Aegean goods (Tanasi 2008: 85-86). While access to a broader spectrum of materials is a logical impetus for Maltese merchants venturing to Sicily, it is impossible to specify whether this was their prime motive for contact. Most of the Sicilian contexts for Maltese pottery are funerary, not places where exchanges were actively happening, and therefore signify the choices made by Sicilian consumers, rather than any clear Maltese motivation.

While the settlement context for Borg-in-Nadur ware at Thapsos (and Cannatello) could certainly indicate a coming together of foreign merchants interested in exchanging their cargoes, the dearth of Aegean materials found in Malta itself must qualify any assumption that such objects were the primary aim of Maltese merchants. Furthermore, the connection between Malta and Thapsos was longer lasting than any Aegean contact, and extend into the Pantalica III Cassibile period (post 1050 BC). In fact, Malta and Sicily display evidence for contact that stretches back into the Castelluccio period, such as a shared practice of using embossed bone plaques (Blakolmer 2005: 654; Tanasi 2008: 3-4). The single sherd of Mycenaean pottery found in Malta (at Borg-in-Nadur), may itself be more plausibly explained as evidence of the connection between Malta and Sicily, as opposed to Malta and the Aegean (Blakolmer 2005: 658). If we are to maintain that access to Aegean goods was an initial aim for Maltese merchants in Thapsos, this would appear to have changed over the course of the occupation of Thapsos, when Aegean imports dry up. This more prolonged contact with the more proximate Maltese archipelago has been interpreted as possibly representing the most important (extra-insular) material connection for the community at Thapsos over the course of its history (Militello 2004a: 328).

Another key feature of the consumption of foreign pottery at Thapsos is the development of so-called Aegean derivative pottery. From the traditional, foreign-focussed and Aegeanocentric perspective, the imitation of Late Helladic formal elements in Thapsos facies pottery is regarded as an indication of the Mycenaean acculturation of Sicilian society (D'Agata 2000: 63; Tanasi 2005: 563). From the consumption-based approach advocated here, however, it seems clear that we are dealing with the active appropriation of foreign materials, and their adaptation to suit local tastes and practices. From this perspective what has been rejected is just as important as what has been adopted. When looking at some of the shapes proposed as Aegean derivatives at Thapsos (see figure 3.13), while a certain shape similarity is evident (and an argument for the influence of foreign

shapes therefore valid), what is more striking is that these derivative pots have rejected a painted finish, instead adopting the burnished finish and incised decoration of traditional Thapsos facies pottery. Again, in the 'Mycenaeanisation' framework, this is explained as the lack of the required skill set to paint these pots: Thapsos potters had "a precise will to imitate Mycenaean vessels without the support [of] a proper technical skill" (Tanasi 2005: 563). Such an absence of necessary technology transfer is further seen in the fact these derivative pots are handmade and not wheelmade. It would appear that local potters at Thapsos had access to finished products, but no accompanying knowledge of how to execute perfect imitations, unlike the situation in southern Italy (Jones *et al.* 2005: 543).

While the lack of technological know-how is certainly a limiting factor, I would argue instead that what is happening in Thapsos is a negotiation between local potters and consumers. The introduction of Late Helladic pottery at the site, and possibly specific practices associated with it, have been translated into Sicilian products, perhaps to make any associated practice seem less foreign. In other words, certain members of the community at Thapsos desired a specific function associated with the imported shape, or perhaps found the formal elements reproduced in the derivatives aesthetically pleasing, but wanted a local-looking pot in practice. As imports were used strictly as grave goods, however, and in nine cases there were tombs that had both imports and Aegean derivative pottery, it would seem that the use of extra-insular pottery versus derivative pottery in funeral practices was more a case of personal choice than any community mandate. The manufacture of Aegean derivative pottery is discussed further as an instance of hybrid production, and perhaps hybrid practice, in sections 5.3.1 and 5.3.2.

Arguably, the most extreme example of foreign influence was the adoption of incised figural decoration (figure 3.13: C1). In this too it may be possible to interpret a (failed?) negotiation: there are only six examples of this technique at Thapsos, five in the tombs and one from the settlement, and it appears to have been quickly rejected as a decorative method. Still, it was attempted on arguably the most important of the Thapsos shapes: the large pedestal basin. A 49cm high vertical plate for such a basin was found in one of the rooms of Complex B in the central habitation zone (see figure 5.3, p. 226), incised with four bird motifs (Voza 1973b: 143, fig. 5). Even in its scarcity, therefore, this decorative experiment seems to have involved culturally important equipment. Furthermore, in this convergence of foreign traits and local practices, there seems to be a counter to any argument regarding the straightforward copying of Mycenaean materials in Thapsos society. Such imitation requires an actual replacement of local materials and practices: "the

process of emulation...involves the rapid appearance and turnover of new valued goods to reinstate the status lost by the downward movement of earlier high-status artefacts" (Hodder 1982: 207). What we have in the lebetiform basin, however, is not the replacement of local materials and practices, but instead a certain experimentation of form. This basin with incised figural motifs was found in the settlement, but even in the tombs there is no such replacement of traditional Sicilian forms by either Aegean imports or Aegean derivative local pottery. The typical funeral 'set' of basin and dipper/cup, originating in EBA Castelluccian society (Maniscalco 1999: 187) is in evidence, even in tombs that have foreign pottery and derivative shapes, suggesting a strong continuity of practice for these burials.

For example, Tomb A1 contained an Aegean piriform jar, a Cypriot White Shaved juglet, an Aegean derivative globular cup with incised decoration (figure 3.13: C1), a traditional Sicilian dipper cup, and several other local cups and jars (Voza 1973a: 40-44). Similarly, Tomb D (figure 3.40) contained nine Aegean pots, three Cypriot jugs, at least one Maltese juglet, a derivative tubular-spouted jug resembling the Aegean feeding bottle, and numerous local cups, small jars, and bowls (Voza 1973a: 34-40; Marazzi and Tusa 2001: 165-71). As this was a tomb that contained forty-nine skeletons it is impossible to say whether certain equipment should be associated with any particular burial, although as the majority of the recovered material is Sicilian, it would be precarious to suggest that for any particular individual burial foreign pottery was being used to replace local. For the other tombs at Thapsos, we are restricted to the selective descriptions and images that the excavator chose to publish (Orsi 1895), making it difficult to compare what is present in tombs containing extra-insular materials, and what is absent. In none of the tombs, however, was there an assemblage that lacked local materials. It is likely, therefore, that foreign pots and foreign influenced derivatives simply augmented traditional burial practices; they did not replace them. I would argue that, from this consumption viewpoint, the identity implications are not of 'Mycenaeanised' residents of Thapsos, but of wealthy, successful, and connected ones. The individuals and groups reflected by these tomb assemblages stressed both their traditional, local roots, as well as their ability to acquire exotic items, not only from the Aegean, but also from Malta and Cyprus. In such a way they conferred a certain social status upon themselves, and made themselves distinct from the tombs that only contained local materials.

At Nuraghe Antigori the Aegean and Cypriot wares also follow a consumption pattern that involves both the use of actual imports, as well as locally made products that

have been influenced by foreign pottery. The actual manifestation of this influence, however, is quite different at Antigori, as is the contextual situation, and the types of pottery involved (table 5.3).

Site:	Antigori	Thapsos
Contexts:	Imports and imitations: settlement; found in areas within and outside of central nuraghe complex. (Possibly feasting, production, and storage).	Imports: strictly burial contexts. Derivatives: both settlement and burial contexts known.
Shapes:	Imports and imitations: kraters, kylixes, rhyta - associated with communal feasting and drinking.	Imports: alabastra, piriform jars, stirrup jars - associated with storage (oils, unguents), especially in tombs. Derivatives: jugs, deep bowls - dining and serving.
Derivative ware aims:	An attempt at visual imitations, but without the technology for perfect copies.	Only shapes are similar to Aegean imports. Technology and finishing techniques are local.
Identity implications:	No itinerant potters. Foreign merchants (from the Aegean or Cyprus) unlikely.	No itinerant potters. Foreign merchants from the Aegean possible, although not strictly necessary.

Table 5.3: Contrasting consumption patterns for foreign or foreign-influenced pottery use at Antigori and Thapsos.

The most obvious difference in the consumption of actual eastern Mediterranean imports is contextual: at Thapsos Late Helladic and Cypriot pottery is restricted to the tombs, while at Antigori these wares are found in and around the nuraghe itself (i.e. in a settlement context). In fact, they are found in several contexts at Antigori: in certain towers (F, C), in an open space within the circuit of the towers $(Room\ a)$, and in three areas outside of the circuit of the towers $(Room\ p,\ q,\ n)$, and therefore, likely outside of the central nuraghe complex. This preference for settlement over burial contexts applies to Sardinia as a whole: foreign pottery (almost all exotica, in fact) is rarely found in tombs. The contrasting contexts for such pottery suggests a different contact situation (see 5.2 below), which at Antigori also led to different, possibly more restricted, shapes for the imports. At Thapsos the pottery found in tombs is mostly small- to medium-sized storage containers, likely for holding oils or unguents, but also valued as containers in their own

right. These containers (alabastra, piriform jars, stirrup jars) represent twenty-seven of the thirty-nine Aegean vessels found in the tombs, and their use in burials is also a feature of their consumption in the Aegean (Vianello 2005: 35). At Antigori, however, although the detail of specific shapes is not as well itemised as at Thapsos, it appears that vessels associated with feasting and drinking (kraters, rhyta, kylikes) were common (Webster 1996: 140).

Beyond contexts and shapes involved, the decisions made by local potters in response to their exposure to foreign wares differ between Thapsos and Antigori. Whereas Thapsos potters created an Aegean-derivative style that resembled Thapsos facies pottery in finishing technique, at Antigori local potters decided to attempt actual 'visual' imitations, albeit using traditional, handmade techniques. The result was Aegean imitations that were slightly different in colour (figure 4.15), and painted with less geometric accuracy than the imported pottery. Presumably the imitation wares were meant to fulfil the same functions as the imports, so there was no similar negotiation necessary as argued above for Thapsos, where a culturally sensitive context (i.e. burial) may have led to derivative as opposed to imitation pottery. It is tempting to read into the contextual findspots at Antigori a sequence of production, storage, and usage. In the towers (F and C), imported and locally imitated sherds could represent actual dining activities for the residents of the nuraghe. In Rooms p, q, and n half of the analysed sherds proved to be locally made (Jones and Day 1987: 267-68), which may mean these areas were involved in pottery manufacture (i.e. outside of the central complex), although the presence of an imported Cypriot pithos may also suggest a storage function. In Room a, within the central complex but not within a tower, rather than Ferrarese Ceruti's unlikely suggestion of a Mycenaean shrine or Lilliu's more plausible suggestion of a rubbish pit, I would suggest we have a space reserved for the storage of equipment used by the residents of the nuraghe. Such a function for these sorts of 'intermediary' spaces has been suggested for nuraghi in general, and Room a at Antigori specifically (A. Usai 1995: 258).

At Antigori, local potters also produced a grey-coloured ware, *ceramica grigio-ardesia*. Again, this type of pottery was manufactured in a local manner, although at least some of the shapes do not appear in the traditional Nuragic repertoire. An eastern Mediterranean influence, however, should not be read into this grey ware, and it is argued in section 5.2.1 that the overall consumption pattern of imports, imitations, and *ceramica grigio-ardesia* point to communication with southern Italy. The manufacture of grey ware at Antigori is also proposed as a hybrid production in section 5.3.1.

As for identity implications read into these patterns of consumption of eastern Mediterranean pottery, at neither Thapsos nor Antigori is there proof of the presence of foreign potters. Even those who propose an Aegean or Cypriot presence at these sites would be hard pressed to see itinerant potters because of the obvious differences in production for these foreign imitated or derived wares. Indeed, Aegean derivative pottery at Thapsos, and both Aegean imitations and grey ware pottery at Antigori are customarily described as the products of local artisans. Where there may be a difference in the contact situation between these sites involves the presence of foreign traders. At Thapsos, its convenient location on the coast, with two natural harbours able to accommodate larger, long-distance boats, the range of materials found in its tombs and settlement, and the fact that Aegean containers commonly associated with burial in the Aegean are used in a similar manner at the site, all make direct contact with foreign (perhaps even Aegean) maritime merchants a possibility. At Antigori, where the presence of Aegean traders has also been interpreted, their direct involvement is not at all obvious. While kraters and drinking cups are (presumably) used in the same general manner as in the Aegean, there is no specific information on the form such drinking or feasting took at the nuraghe. Furthermore, it could be argued that such vessels (cups, large mixing bowls) do not lend themselves to a wide spectrum of use. Very little specific information regarding their use would be required to make such vessels functional in a Sardinian context. Therefore, the direct presence of maritime merchants from the Aegean or Cyprus is not a prerequisite for the appropriate use of foreign pottery at Antigori. That there was a need to make such vessels locally would seem to indicate that, at the least, such contacts could not be relied upon to furnish local needs consistently.

5.1.2 The Consumption of Oxhide Ingots and Cypriot Involvement in Sardinian Metallurgy

As outlined in Chapter Four, the conspicuous presence of copper oxhide ingots in Sardinia, coupled with their absence in nearby mainland Italy, and relative scarcity in Sicily, has led certain scholars to posit a possible Cypriot involvement in Sardinian metal production. This idea of Cypriot interest, occasionally suggested as possible Cypriot control, however, is not so much based on a consideration of the contexts in which these ingots and ingot fragments are found, but rather seems to be founded on an assumption that a more complex society could control a less complex one, even at a distance (Blake 2008: 25).

When looking at the presence of oxhide ingots in Sardinia from their actual archaeological contexts, the impression is overwhelmingly one of Sardinian peoples

collecting, exchanging, and consuming these ingots to satisfy their own local requirements. The preponderance of founders' hoards as contexts, and the co-presence of local planoconvex ingots and local bronze forms, would seem to indicate strongly that oxhide ingot fragments were used and valued in the same manner as the corresponding local materials. The three oxhide ingot fragments from the Pattada hoard which may be local productions may speak of a certain Sardinian experimentation with an extra-insular form, in the same way that Antigori potters experimented with Aegean pottery. Whereas the Antigori imitations were presumably created to satisfy local demand for these feasting and drinking vessels, it is admittedly more difficult to interpret a possible motivation for the Sardinian production of copper ingots in oxhide form based on this isolated example. If other LIA analyses were to show further Sardinian oxhide ingots at other sites, then perhaps a model involving Sardinia's desire to engage in the circulation of this form could be proposed.

The supplementary evidence used to support the notion of Cypriot involvement in Sardinian metallurgy, that of Cypriot-looking smithing tools, is too small and problematic a data set to be convincing. As outlined in section 4.4.2, the closest parallels come from non-archaeological contexts, and thus cannot be analysed from a consumption point of view to argue either for or against Cypriot presence. The sledgehammers, by Lo Schiavo's (Lo Schiavo et al. 1985: 22) own definition, do not resemble Cypriot prototypes, and the tongs, although similar, do not display much formal variety throughout the Mediterranean. In fact, the two Mediterranean types known (i.e. 'Aegean' and 'Levantine' tongs) are both present in Cyprus in the LBA (Lo Schiavo et al. 1985: 22). Regardless of which type was present in Sardinia, therefore, a possible connection to Cyprus could have been made. The Levantine type of tongs that are found in Sardinia have also been (partially) recovered from the Cape Gelidonya shipwreck (Catling 1964: 99), indicating that these tools were mobilised in the LBA, either as finished products to be exchanged, scrap metal, or the personal property of an itinerant metallurgist. Their presence in a founders' hoard at Sant'Anastasìa/Sardara (Cagliari) (Lo Schiavo 2005c: 294) could be interpreted as an imported item that was brought to Sardinia as a working tool or scrap metal. A Sardinian smith, exposed to such tools, would certainly have possessed the requisite skill set to produce similarly shaped tongs. Such a scenario has been proposed for other items on Sardinia (e.g. tripod stands, figurines, rattail tanged daggers) without the insistence of direct Cypriot presence (Lo Schiavo et al. 1985: 9, 44, 59).

Finally, there is a chronological difficulty in proposing Cypriot involvement in Sardinian metallurgy. While the bulk production of oxhide ingots is thought to have ceased

in Cyprus some time around 1150 BC, the context of such ingots in Sardinia, when datable at all, are often in (very) Late Bronze or Early Iron Age hoards (Lo Schiavo 2003: 24). Therefore, there is no clear correlation between their archaeological context in Sardinia, and the LBA presence of itinerant smiths or prospectors. The fact that almost all oxhide ingots in Sardinia are found in fragments may be further indication that they were broken up and re-circulated long past any presumed LBA importation to the island. To posit a Cypriot presence based on the evidence of oxhide ingot fragments is making considerable assumptions about the biography of these objects in the decades before their final deposition. If we were to find ingots or ingot fragments in metallurgical production contexts, complemented by other Cypriot objects (e.g. pottery, smithing tools), this would provide at least some small basis to propose the direct presence of Cypriot metallurgists. This is never the case, however; island-wide there is only one instance of the co-presence of oxhide ingot fragments and Cypriot-looking objects. This is the hoard at Pattada, again, where the ingot fragments were in a founders hoard with three Cypriot-style axes. As a founders hoard, however, with most of its components (including three of the oxhide ingot fragments) interpreted as local, any Cypriot presence read in to this 11th century BC hoard would be highly dubious.

One explanation for the later or prolonged presence of oxhide ingots in Sardinia is the suggestion that when Cyprus and the eastern Mediterranean began the change to iron technology from the 12th century BC, Sardinia and the west continued to represent a more consistent market for the bulk trade of copper (Knapp 1990: 150-51). This still may not speak of a direct Cypriot presence in Sardinia, although it does provide a logical Cypriot motivation 'from a distance.' If Sardinia was viewed as a place to dump surplus copper by Cypriot elites, copper that they would have had increasing difficulty exchanging in the Iron Age east, this would challenge the suggestion that Sardinia was regarded as an exploitable *source* of copper by active, present eastern Mediterranean prospectors (Bass *et al.* 1967: 77).

The consumption of oxhide ingot fragments and Cypriot-looking bronze objects in Sardinia, therefore, when read from a local perspective, seems to indicate clearly the handling, manipulation, and exchange of these materials by Sardinian agents. As is the case with Aegean pottery at Antigori and Thapsos, the presence of foreign itinerant craftspeople is not indicated by the presence of imported goods, and the presence of foreign agents of exchange merely possible but not mandatory. The next section expands on the interpretive difficulties in reading specific corporate identities into object diasporas.

5.2 Beyond Natives and Foreigners: The Geographies of Mobility in the Central Mediterranean

But before the prehistory of the western Mediterranean is once again peopled by enterprising traders whose activities provided the driving force for the diffusion of artifacts and monuments and for similarities in insular evolution, a critical view of the archaeological evidence is required (Chapman 1985: 146).

In the traditional models that stress the Mycenaean or Cypriot penetration of Sicily and Sardinia, foreign objects are used as markers for establishing long distance trade routes, and the placement of foreign 'emporia.' Such commercial encounters are deemed systematic and persistent, and no effort is made to separate foreign objects from the direct presence and motivations of foreign agents. Typical maritime ventures are envisaged to have involved eastern Mediterranean boats, travelling long distances, and were destinationoriented (De Miro 1999a: 78; Ferrarese Ceruti and Assorgia 1982: 170-71). The conspicuous amount of foreign goods at places like Thapsos, Cannatello, and Antigori, therefore, indicate that they were the preferred destinations for specific goods, and involved in a network of 'directional commercial trade' (Renfrew 1972: 470-71). While it is true that these sites stand out from their neighbours in the amounts of foreign materials recovered, such 'spikes' seem to be more pronounced because of the dearth of foreign goods elsewhere in their regions, rather than having particularly large assemblages of exotica themselves. As centres near the coast, however, it is logical that they should have more extra-insular materials than interior locations, and there is still a significant fall off in Aegean materials between these sites and comparable ones in southern Italy. Inevitably, there is neither enough material with which to assume systematic contact, nor did such trade clearly involve primarily raw materials, as stipulated in Renfrew's (1972: 470) model. While the lack of any MBA or LBA shipwreck in the central Mediterranean is unfortunate, it seems clear that it would not take much foreign material in its hold before such a wreck was ambitiously labelled 'Mycenaean' or 'Cypriot.' As Harding (1984: 258) suggested, however, the nationality of such ships is impossible to ascertain, and "meaningless in a prehistoric context."

In this study I propose a more general and flexible model of object diasporas. In this interpretation, object scatters do not directly relate to any long-distance trade routes, as there are many ways that foreign objects can circulate, and at different scales of exchange. In fact, the moment the objects move beyond the coastlines of Sicily or Sardinia, the participation of any foreign agents is unlikely, and their motivations for contact become irrelevant. The amount of data recovered in almost every instance for these two islands, as

illustrated above, does not allow for an assumption of systematic exchange relationships. An object diaspora model makes an active separation between foreign objects and foreign agents of exchange: an Aegean pot found in a tomb in the centre of Sicily, or an oxhide ingot fragment recovered from a hoard many miles inland in Sardinia, does not clearly demonstrate the patterned behaviour of foreigners. Often, the harbour point of entry cannot be clearly ascertained if there is no obvious, singular communication route between the coast and the interior location.

For example, does the LH IIIA2 alabastron fragment found in Nuraghe Arrubiu (northern Cagliari) represent part of the cargo of an Aegean ship landing somewhere on the east coast of Sardinia, which was subsequently transferred directly from the coast to the inland nuraghe consumer? This object represents an earlier phase of Late Helladic pottery in Sardinia than what is typically found, which may indicate the alabastron had circulated within the region for a period before its eventual deposition in Nuraghe Arrubiu. Its original central Mediterranean port of call could just as easily have been Scoglio del Tonno in Apulia: the pot could have passed through several hands, had more than one consumer, passed overland to the Tyrrhenian coast of Italy, and then shipped to Nuraghe Antigori with a mixed cargo that included Aegean pottery, before eventually following local exchange networks inland to Arrubiu. (Certain patterns that may connect Antigori and the Italian mainland are explored below, see 5.2.1). This could explain why a LH IIIA2 sherd is present in an island of mostly LH IIIB-C imports. The point is this alabastron's final deposition does not allow for the reconstruction of any kind of predictable route of exchange, nor does its presence necessarily indicate the actions of Aegean agents. Nevertheless, the dominant paradigm of direct interaction over long distances has allowed for the proposal of Nuraghe Arrubiu as a gateway community, solely based on this single sherd (Ruiz-Gálvez 2005: 20).

Rather than assume that long distance, directional shipping was the norm for the second half of the 2nd Millennium BC, and following Braudel's (1972: 104, 107) lead, I would propose that smaller, more regionally-focussed tramping vessels were responsible for the bulk of exotica distribution within the central Mediterranean. While some larger, longer distance ships may have visited key points in the region, there is no need to assume an eastern Mediterranean ship for every eastern Mediterranean object found (Knapp 1990: 124). With smaller ships, able to reach a wider range of coastal settlements (i.e. ones that could not accommodate larger vessels), much of the foreign material could have dispersed via local, overlapping spheres of exchange, where "a series of distinct trading

worlds...intersect and interweave" (McCormick 2001: 613). These trading worlds were likely more complicated than the simple binary opposition of mobile Aegeans and Cypriots versus stationary Sicilians and Sardinians. Such interlocking exchange spheres could move items over long distances without the need to invoke directional shipping, and would explain a general fall off of Aegean and Cypriot goods in the farther west and north of the central Mediterranean. As van Wijngaarden (2002: 279) described more generally (and only with regard to the circulation of Aegean pottery), regional exchange networks in the central Mediterranean were "interconnected" with those of the Aegean. The spread of such pottery, therefore, was due to the overlaps occurring between the regions: eastern Mediterranean maritime merchants did not 'create' sea trade routes in the central Mediterranean, they encountered them, and in some cases may have exploited them. In fact, only in the instances of conspicuous amounts of eastern Mediterranean materials (i.e. at Thapsos, Cannatello, and Antigori) should a direct link be proposed as a possible explanation.

While I am promoting a trade pattern of inter-locking, overlapping spheres of exchange, and arguing that individual objects could have covered long distances in such a manner, (and believe this is a more typical scenario than directed, long-distance voyages), I am reluctant to demand such a scenario. There is a greater need to go beyond simple debates regarding the mechanisms and actors involved in the spread of materials, and I would argue that an object diaspora scenario, where locals interact with foreign objects, influences, or ideas – but not necessarily people – still represents a cultural encounter, one which can result in discrete changes in material practice (see section 5.3). Furthermore, just as the data are not sufficient to predict a model of long distance shipping accurately, an interlocking spheres of exchange framework can only be proposed as one of several possible exchange mechanisms. The diffusion of objects can and most likely did involve different forms (i.e. in scale, distance, and agents involved), and distribution patterns, even when supported by a sufficient amount of evidence, can still be interpreted as the result of different exchange systems (Renfrew and Bahn 2008: 376). It is almost impossible to identify the specific agents of exchange based solely on the final deposition of objects.

Rather than promote a narrative of Aegean or Cypriot prospectors in the central Mediterranean, or a contrary one of central Mediterranean maritime merchants acquiring goods at a distance and bringing them back to Sicily or Sardinia, it would be better to assume that everyone is involved, at multiple scales. In other words, to follow a methodology that is "inclusive and general, not exclusive and specific" (Knapp and van

Dommelen 2010: 6). In such a way, the direct presence of Aegean or Cypriot traders can be entertained for certain specific instances, but need not be the dominant paradigm of contact. A closer look at the way Aegean-looking and grey ware pottery were used and produced at Nuraghe Antigori follows, which could be interpreted as reflecting contact with the Italian mainland, rather than the direct presence of Mycenaean maritime merchants.

5.2.1 Aegean-Looking Pottery in Antigori and Southern Italy: Patterns of Consumption and Production

The interpretation of the presence of Aegean pottery at Nuraghe Antigori provides an excellent example of how the idea of mobile foreign traders and stationary local receptors tends to over-simplify the evidence. The way in which Aegean-looking pottery was imported and produced at both Nuraghe Antigori and southern Italy involves several similarities, and some key differences (table 5.4). The similarities indicate a shared experience, argued here as representing direct contact between the community of Antigori and mainland Italian society. The differences relate on the one hand to different cultural encounters experienced in these two areas (i.e. direct interaction with Aegean maritime agents in southern Italy, but not in Sardinia), and on the other to the identities of the potters involved (i.e. either Aegean itinerant potters or well trained southern Italian potters at the mainland centres, and local Sardinian potters at Antigori). For the purposes of this comparison, southern Italy is defined as the provinces of Calabria, Puglia, and Basilicata, where twenty-four sites have produced evidence of Aegean-looking pottery (van Wijngaarden 2002: 328-29, sites 297-320).

Three features of the Aegean-looking pottery at Antigori stand out: the prevalence of open shapes over closed, indicating dining, drinking and serving vessels (i.e. evidence of social practice); the petrographic analysis, which showed the majority of tested Aegean-looking pottery was of local manufacture (Ferrarese Ceruti *et al.* 1987: 36); and the introduction of a locally produced grey-coloured ware, called *ceramica grigio-ardesia* (Ferrarese Ceruti 1985: 606). This pattern of imports, local imitations, and grey ware is also noted in southern Italy, although not in Sicily or Lipari (see below). The presence of these imports and imitations at Antigori, found within and around the nuragic complex, would seem to indicate the importation of high-status painted pottery for its own sake, not necessarily based on its contents, although van Wijngaarden (2002: 278) postulates that both container and contents are valid considerations for exchange. This importation was

then followed by the commission of similar wares to be produced locally, possibly due to the rather infrequent arrival of eastern traders or eastern goods.

Area:	Southern Italy	Antigori
Aegean looking pottery totals:	1000s, spread over 24 sites in Puglia, Basilicata, and Calabria. 3 sites have at least 100 sherds.	Approximately 200.
Percentage of total ceramic assemblages:	< 5%.	Uncertain, but likely about 1%.
Features of locally produced Aegean-looking pottery:	Wheel-made, levigated buff clay, painted.	Either handmade or formed on a very slow wheel, matte painted.
	Dramatic increase in production during LH IIIB/C phase.	Represents the majority of the Aegean-looking pottery.
	Credited to itinerant potters or local Italic peoples trained by Aegeans.	Credited to Mycenaean residents, but much more likely made by locals.
Grey ware:	Ceramica grigia: local impasto shapes made on a wheel, with clay selection/ preparation, high firing kiln similar to Aegean practice.	Ceramica grigio-ardesia: some shapes foreign to Nuragic pottery (Trojan? Italian?), handmade, or on a slow wheel, high firing temperatures.
Contexts:	Settlements.	Settlement.
Provenience results:	Peloponnese Central Crete Rhodes Central Greece Sardinia?	Peloponnese Central Crete Western Crete Southern Cyprus
Shapes:	Generally table wares.	Generally table wares.
Motifs:	Curved lines with dotted border. Spirals (very common). Diamond with crosshatched fill.	Curved lines with dotted border. Spirals. Diamond with crosshatched fill (locally made example).

Table 5.4: Patterns of Aegean-looking pottery consumption and production, Antigori versus southern Italy.

Contextually, the Aegean-looking pottery in southern Italy and Antigori both come from settlement contexts, as does that found in the Aeolian Islands, but in contrast to the

situation in Sicily where burial contexts are more common. The provenience analyses for the imported Aegean ware show some common, albeit very general, sources for both regions. In Antigori, imports were traced to clay sources in the Peloponnese, central and western Crete, and one sample from southern Cyprus (Jones and Day 1987: 268). In southern Italy, possible sources included the Peloponnese, central Crete, (perhaps) central Greece (i.e. Boeotia), and five sherds from Scoglio del Tonno that were thought to be Sardinian (Jones 1986: 208; Jones and Vagnetti 1991: 133). The presence of locally made Aegean-looking pottery in both areas has been confirmed by petrographic and chemical analyses (Jones and Day 1987; Ferrarese Ceruti et al. 1987). In fact, such imitations represent the majority of Aegean-looking painted pottery at Antigori (Ferrarese Ceruti et al. 1987: 36), and dramatically increase in southern Italy during the LH IIIB/C phase, the same phase represented stylistically by the Antigori sherds (Jones et al. 2005: 541). When analysing these imitations from a production perspective, however, a key difference is noted. On the mainland, the production method is very similar to that of the Aegean itself, with the preparation of well-levigated buff clay, decoration using lustrous paint, high firing temperatures, and perhaps most significantly, evidence of being wheel made (Vagnetti 1999: 143). On Sardinia, the local imitations were decorated in matte paint, did show indications of being fired at a high temperature (Ferrarese Ceruti and Assorgia 1982: 173-74), but were fashioned either by hand or on a very slow wheel (R.E. Jones, *pers. comm.*).

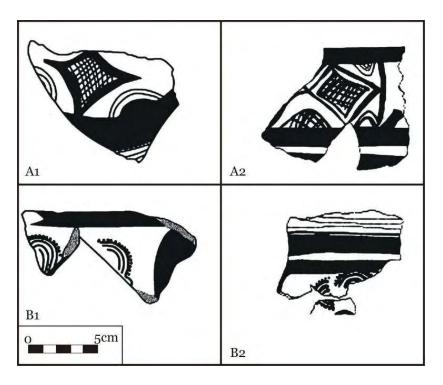


Figure 5.1: Comparison of Late Helladic pottery motifs between mainland Italy and Antigori. A1, B1: Scoglio del Tonno (Puglia); A2, B2: Antigori. (After Russell 2010: 118, fig. 6.5).

In terms of painted motifs, some similarities between the mainland and Antigori can be detected (figure 5.1). These include: concentric curved lines bordered with dots; spirals; and diamond shapes with cross-hatched interiors. With regards to shapes, as was mentioned above, both regions tend to have table wares most strongly represented (Jones *et al.* 2005: 542). It is difficult to assess closely any shape similarities between the Antigori grey pottery and either impasto or *ceramica grigia* forms on the mainland based solely on profile pictures. Both Smith (1987: 99) and Giardino (1995: 45, fig. 20) described Sardinian grey ware as similar to the *ceramica grigia* and traditional *impasto* pottery of the mainland. One distinctive handle found in Room *a*, which folds over from the rim, does seem to resemble similar features in both *impasto* and *ceramica grigia* (figure 5.2).

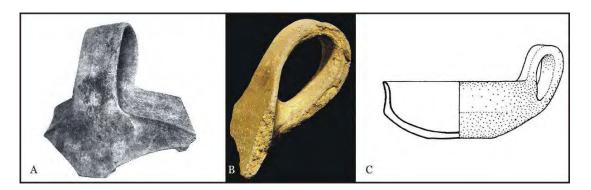


Figure 5.2: Comparison of fold-over rim handles. A: grey ware sherd from Scoglio del Tonno (Puglia); B: grey ware sherd from Antigori, Room a; C: *impasto* handle from Termitito (Basilicata). (After Säflund 1939: 474, fig. 18; Ferrarese Ceruti 1985: 610, plate M12; Bettelli 1999: 462, fig. 1)

A final point of comparison that should be made is the presence of large storage vessels (*pithoi* or *dolia*) found in both areas concerned. Here there seems to be significant differences in consumption, with locally made examples well-known on the mainland, but only two examples, both of imported vessels, at Antigori. The *dolia* in southern Italy are made from buff levigated clays, fired at a high temperature, and made use of the wheel in some cases (Vagnetti 1999: 147). In terms of decoration, raised bands, and later grooved bands, are found on the Italian examples, while one of the imports in Sardinia has a Cretanstyle herringbone pattern, and the other a Cypriot-style wavy band (Ferrarese Ceruti *et al.* 1987: 16, 18). Provenience analysis has substantiated these assignments (Jones and Day 1987: 262-63).

Contact between mainlanders and Sardinians could have taken place at Antigori, with Italian sailors bringing both the imports, and perhaps imperfect knowledge how to reproduce them, to the island. Alternatively, the imported pottery could have been acquired by Sardinian merchants sailing within the central Mediterranean, as such wares are

certainly well represented in Sicily, the Aeolian islands, and southern Italy. As locally-made imitations of Aegean pottery are not well known in Sicily, where only one vessel has been postulated as being locally manufactured (Jones and Levi 2004: 173), and only a single sherd of grey ware has been found in Lipari (Pålsson Hallager 1985: 303), contact with the mainland presently appears to be the best fit. Furthermore, from a chronological perspective, the consumption of Aegean pottery in Sardinia seems largely to postdate the presence of such wares in Sicily or Lipari (Blake 2008: 7; Taylour 1980: 816-17). The agents of mobility could also have transferred information about the types of dining or drinking practices associated with such wares, and imparted this knowledge to the consumers at Antigori. That these consumers found such practices – or at least the pottery itself – worthwhile would seem to be indicated by the commissioning of local copies.

The 'imperfect' way in which Aegean wares were imitated at Antigori may be due to conservatism of pottery practices there, or just a lack of information about the production sequence required to make closer approximations. It has been noted that even skilled potters who competently practice in handmade traditions are not automatically equipped to adopt wheel making techniques, and may not see any immediate benefit in doing so (Nicklin 1971: 34-37). Loney (2007: 202), investigating the adoption of wheelmaking techniques on the Italian mainland, stresses that "the conservative nature of production" in southern Italy, where direct contact with Aegean artisans may be interpreted, led to the wheel being only disjointedly adopted. On Sardinia, where there is little evidence to base the presence of Aegean merchants or itinerant potters, any conservatism was also complemented by technological ignorance, leading to a "negative transfer" of skills (Loney 2007: 183), which resulted in the less-exact imitations produced at Antigori.

If we accept that both Aegean imports, and a vague knowledge of how to produce them, came to Sardinia via the Italian peninsula, then the possibility must also exist that some of the 'imports' at Antigori and other Nuragic sites may actually be Italian imitations. Some evidence for this might be read in a common provenience result discovered between pottery found at Antigori and at Scoglio del Tonno (Jones 1986: 208). The chemical signatures found on five 'suspected' imports at Scoglio del Tonno, which contained relatively high levels of iron and nickel, were not readily comparable to known clay sources in the Aegean or around Scoglio itself. They may have been manufactured on Sardinia, as some examples at Antigori also showed high iron and nickel content (Jones 1986: 212-13, Table 2). Given how closely Aegean wares were imitated on the mainland,

however, and conversely how dramatically they departed from Aegean production techniques at Antigori, it would be unusual for the community at Scoglio del Tonno to desire inferior Sardinian copies, and I would suggest that both the Sardinian and Italian pottery with these chemical signatures were produced on the mainland, from an as of yet unknown clay source. Jones (1986: 208) acknowledged that if these samples were made in Sardinia, their clay source "has yet to be established."

Given that the *ceramica grigio-ardesia* produced at Antigori did not involve the same production techniques as *ceramica grigia* on the mainland, and that it was not simply a new way of decorating traditional local pottery, as it seems to have been in southern Italy, then it must have been the final appearance (i.e. the grey burnished finish) of the product that was the desired element. Why was this grey finish a sought after feature? For the Italian mainland (specifically for the site of Broglio di Trebisacce), Vagnetti (1999: 149) tentatively suggests the grey finish either satisfied the local practice of producing pots with dark coloured surfaces, or was a "cheap substitute for silverware." Just how prevalent silver vessels would have been at Nuraghe Antigori is a debatable point (certainly no metallic pottery has been found there), nor is it certain that the nuraghe-dwelling elite would have been familiar with such high-status material. The samples of grey ware at Antigori are of regular thickness, and do not appear to be particularly metallic-looking. If the shapes reproduced at Antigori are in fact somehow related to mainland *ceramica grigia* (or to the *impasto* wares that the Italian grey wares are emulating), then there could be a specific mainland practice that is being copied on Sardinia.

Smith (1987: 160) suggests that grey ware in Italy may have provided resident foreign traders with better quality tableware, and that the large *dolia* containers provided them with their traditional means of storage. Why such traders would have required such niceties, however, is not immediately evident. Her other suggestion, that the grey pottery was aimed at local Italian consumers who were denied access to higher-status Aegean painted wares, seems more plausible (Smith 1987: 160). Another idea, based on contextual evidence from Broglio di Trebisacce, also interprets the use of grey ware as an indication of social identity. In an area associated with ritual consumption at that site, closed storage vessels were represented by Late Helladic looking pottery, while open dining and drinking shapes were rendered in grey ware and impasto. This dichotomy was interpreted as representing those in control of surplus supplies on the one hand, and "commoner" participants on the other (Borgna and Càssola Guida 2005: 502). This is an intriguing idea for Antigori, although there is no such functional distinction between Aegean-looking

pottery and grey wares there: both are more commonly represented by serving and dining vessels.

When Aegean pottery ceases to be imported by the community at Antigori, the practice of making local copies also ends, although grey ware pottery persists for a short while after (Ferrarese Ceruti *et al.* 1987: 35). For some this may indicate that Aegean ships no longer sailed to Sardinia. I would prefer a framework that stresses the value of such wares to the local consumers: when the imports no longer arrived, such material lost its exotic association to successive generations of nuraghe dwellers, and they were not inclined to have it copied anymore. In the LBA, certain nuragic complexes, including Antigori, became more fortified (Trump 1992: 199), an indication of an elite class that was becoming more entrenched, wealthier, and able to exert administrative control over larger territories. In such an environment one may expect to find increased craft specialisation, as elites begin to consume more labour intensive materials, both local and imported, to promote their privileged positions within society ideologically. In step with this increased craft specialisation, there may be a certain amount of technical experimentation (Loney 2007: 200), such as the attempt to produce Aegean-looking pottery and grey ware locally at Antigori. Grey ware is also discussed as a possible instance of hybrid practice in section 5.3.2, although it is inevitably rejected as such.

One hurdle to interpreting a connection or exchange between Antigori and southern Italy is the lack of Nuragic finds for this period on the mainland, and the lack of anything particularly Apennine in Antigori. The former problem is certainly a challenge to the insistence that common pottery consumption patterns indicated communication and trade between these regions. It is possible that Sardinians traded perishable items such as livestock, or agricultural products not associated with an overtly Nuragic vessel. While copper may have been the most marketable raw commodity Sardinia possessed, whether it was producing a surplus amount for export is unknown, and Antigori itself has not yielded evidence of being conspicuously involved in the production or exchange of copper (Webster 1996: 142). Clearly identifiable Italian products at Antigori are restricted to a serpentine fibula from Tower F (Ferrarese Ceruti 1997d: 406), which was found in a later stratum than the Aegean pottery or grey ware found there. The high-nickel content Aegean sherds mentioned above from Scoglio del Tonno and Antigori might indicate an Italian product in Sardinia, albeit one that does not look Italian. The hyper-specialisation and extreme regionalisation of Mediterranean archaeology as a practice may militate against either *impasto* pottery being recognised in Sardinia, or Nuragic sherds in Italy. The latter is usually described as not particularly distinctive, and it is only in the past twenty years that it has been recognised in extra-insular contexts (Watrous *et al.* 1998; Lo Schiavo 2005d). Beyond these possible methodological considerations, however, it should be kept in mind that while the proposed Antigori – southern Italy connection lasted some time (to judge by the stratigraphy at the nuraghe), it was never a particularly intensive exchange, and it may be impossible to determine whatever Antigori gave back in exchange for Aegean or Aegean-looking imports. Given that Sardinian products are known on the mainland from both earlier periods, such as obsidian in EBA or MBA contexts (Blake 1999: 40), as well as later, such as Nuragic bronze boat models (Lo Schiavo 2000: 155), it would be unusual for there to have been no contact between the two in the interim.

Regardless of which exchange mechanism brought imported goods to Antigori, or Sardinia in general (and island-wide there were likely several different patterns of mobility and scales of trade involved), one aspect that certainly needs to be emphasised more is the potential mobility of the islanders themselves. While foreign material remains found on Sicily and Sardinia may give the erroneous impression of a stationary society receiving them, it is certainly probable that, at least for short and middle range voyages, the maritime technology of these islander communities was sufficient to participate in overseas exchange networks (Harding 1984: 258). In the following section, another scenario where islanders are often assumed to be stationary, to the extent that they are nearly invisible, is examined: the fortified southern Sicilian site of Cannatello. In this case also, the presumed mobility and activity of foreign agents, and the assumed passivity and atrophy of locals, has led to suggestions of foreign settlement and control.

5.2.2 Is Cannatello a Mycenaean Emporium?

One of the problems with the assumption that eastern Mediterranean objects in the central Mediterranean represent the by-products of long distance, directed shipping from the east is that it can lead to contentious interpretations of central Mediterranean sites and their roles in this network of exchange. Such is the case at Cannatello, whose excavator commonly refers to as a 'Mycenaean emporium' (De Miro 1999a; 1999b; 2004: 449). De Miro is not particularly specific about what he means by such a label, and his emphasis on the Cypriot flavour of the ceramic assemblage (which he reads even in the Late Helladic ware), somewhat confuses the issue. His comment that Cannatello was an Cypro-Aegean "outpost," on a well defined route, involved in managing the mining and exchange of minerals (e.g. sulphur) in the region (De Miro 1999a: 79), would seem to indicate a belief in a settled foreign presence at the site, and hints at a belief in foreign control of the area.

De Miro (1999a: 80-81) saw such a settled presence extended into the interior valleys of central Sicily, based on the presence of Aegean pottery and *tholos*-style tombs at places like Milena, where there was also the presence of a locally made Aegean-looking amphora.

It is clear from this interpretation that the proposal of Aegean (or Cypriot) presence in Cannatello and its region, based on an assumption of "Directional Commercial Trade" (De Miro 1999a: 78) to the south coast of Sicily, has led to this expansive labelling of Cannatello as a Mycenaean emporium. It should be kept in mind that this interpretation is based on a maximum of fifty sherds of pottery. While the amount of local Sicilian pottery at the site is never enumerated, it seems clear that these sherds must represent a small minority of the ceramic assemblage. Even if we read De Miro's label of a Mycenaean emporium as signifying a local site that was involved in the exchange of Aegean and Cypriot imports this would be a misleading description. The presence of Nuragic and Borg-in-Nadur ware pottery at Cannatello – perhaps in greater quantities, and, in the case of the former, with some suggestion of local production – would make it equally valid to call the site a Sardinian or Maltese emporium. In all these cases, of course, such a label would be inappropriate. De Miro seems prone to promoting such a discourse of 'Aegeanness' (see Chapter Six), perhaps to mask the small amount of eastern Mediterranean material actually involved. In one remarkable instance, he refers to a pit with animal bones in it as a "sort of hecatomb" (De Miro 1999b: 446, my translation).

There are other archaeological reasons to question a Mycenaean emporium interpretation for Cannatello. Although the site is still not well published, two features stand out: its location 1.5km inland, rather than on the coast (i.e. like Thapsos); and the bulk of the Aegean (or Cypro-Aegean) pottery coming from one context (Hut 8) in the first phase of occupation. Given its location, a significant distance from the coast, the classification as an emporium (of any kind) seems questionable. Did foreign maritime merchants actually leave their ships (and livelihoods) behind on the shore, to communicate and negotiate with the residents of Cannatello? In that case, it would almost be mandatory to assume a settled presence of foreigners at Cannatello, if they were physically present at the site. Unfortunately, publication has not been sufficient enough to allow for a functional analysis of the structures excavated within the walls, to determine if accommodating foreign merchants could plausibly be interpreted. Obviously, without knowing anything about the harbour situation or its facilities, we are missing a large piece of the puzzle for Cannatello. How much of the cargo that was unloaded from any ships anchored there

actually made it to the heavily fortified site? Were there structures on the shore associated with the storage of cargo, or the accommodation of sailors?

As for the bulk of Late Helladic pottery coming from Phase 1 Hut 8, this would seem to render the interpretation of the site as a Mycenaean emporium throughout its existence as teleologically reductionist. If the stratigraphic relationship of the buildings excavated is accurate, Phase 1 (figure 3.45) is only represented by three structures and the thinner inner circuit of the wall. The site does not take off architecturally until the Phase 2 (figure 3.46), which is strangely labelled a transitional period by the excavator (De Miro 2004: 449), even though this busy phase is represented by eight huts, a thicker defence wall, and even an inner partitioning of the space by the trapezoidal wall. Yet this apparently quite busy and prosperous phase has only produced a small amount of eastern Mediterranean pottery. When the Nuragic and Borg-in-Nadur pottery is finally published, it will be interesting to note their chronological and spatial relationships within the site.

A comparison to the situation in southern Italy is instructive here. It will be recalled that in southern Italy, comprised of Puglia, Basilicata and Calabria, the presence of Late Helladic pottery covers a much broader chronological spectrum (LH I – LH IIIC) (Jones et al. 2005: 541) than that recovered from Cannatello. It has been found at twenty-four sites in southern Italy, compared to six in the province of Agrigento, where Cannatello is situated. Furthermore, five sites in southern Italy have produced at least fifty sherds of pottery (van Wijngaarden 2002: 328-29, catalogue I). Only Cannatello itself can boast such a total for southern or western Sicily: all other sites combined have produced less than fifty sherds. In both Cannatello and southern Italy Late Helladic pottery is found in nonfunerary contexts. Whereas in Cannatello there is a prevalence of storage and transport vessels (Vianello 2005: 112), on the mainland the division between storage/transport and serving/dining vessels is more evenly split (Blake 2008: 17, fig. 2). In southern Italy there is also evidence for locally produced Aegean-looking pottery, which is not found at Cannatello, where only Sicilian and Nuragic pottery were produced locally (Levi 2004: 237). Petrographic and chemical analysis has indicated that the local production of Aegean-looking pottery was not centralised at any particular site in southern Italy, but rather several areas seemed to have been involved in its manufacture, including Scoglio del Tonno (Puglia), Porto Peroni (Puglia), Termitito (Basilicata), Torre Mordillo (Calabria), and Broglio di Trebisacce (Calabria) (Vagnetti 1999: 139).

Technologically, Italian-made Late Helladic-style pottery closely follows the production methods employed in the Aegean itself, which indicates a direct transfer of the

appropriate technologies, and perhaps the presence of Aegean-trained potters (Jones *et al.* 2005: 543). These technologies were also partially adopted towards the manufacture of a hybrid form of pottery, *ceramica grigia*, which incorporated Aegean-style clay levigation, firing, and use of the wheel, although the shapes produced were not strictly Mycenaean, but included those of traditional *impasto* pottery as well (Vagnetti 2000b: 312). Only at Thapsos has an impact on local ceramic production been inferred from the interaction of locals and Aegean pottery in Sicily (D'Agata 2000: 64), and at that site there was no indication of technology transfers (see 5.3.1). The direct presence of Aegean agents, therefore, be they artisans or merchants, is much more evident in southern Italy than southern and western Sicily, given the range of sites involved, the existence of technologically correct local production, the greater amount of data in general, and the longer timeframe of contact. This also makes geographic sense, as there are physically fewer intermediate places for middlemen traders to have played a role between the Aegean and southern Italy, unlike in Cannatello, where Aegean pottery could have been acquired via contacts with southern Italy, Lipari, or eastern Sicilian centres like Thapsos.

Narrowing the comparison to a single site, Broglio di Trebisacce in northern Calabria, further illustrates the interpretive problems of labelling Cannatello a Mycenaean emporium. Broglio, like Cannatello, is not placed directly by the sea, but lies 1km inland, in the Plains of Sybaris (van Wijngaarden 2002: 237). There is settlement evidence covering the MBA and EIA at the site (Vagnetti 1999: 143), and the Aegean pottery present involves LH IIIA – IIIC forms, although IIIB2 – C sherds are more prevalent (Vianello 2005: 108). This stands in contrast to Cannatello, where LH IIIA sherds were the most common (De Miro 1999b: 446), although it should be noted that in terms of raw numbers there is far more Aegean-looking pottery for every phase at Broglio than at Cannatello. In fact, not including material recovered after 1990, there were six hundred and forty-seven sherds recovered at Broglio, of which three hundred and fifty-two were large enough to be analysed (van Wijngaarden 2002: 239). Of these three hundred and fifty-two sherds, only one hundred and seventeen were classifiable to a particular phase of Late Helladic pottery, so any prevalence of LH IIIB – C sherds should be considered a tentative interpretation.

Nevertheless, the provenience analysis of these three hundred and fifty-two sherds showed that only a small minority (twelve) were imported, while the majority were manufactured in the Plains of Sybaris (van Wijngaarden 2002: 240, table 17.1). This speaks of a significant and prolonged process of local production at Broglio which, while

more prominent in the LH IIIB – C periods, does include some LH IIIA pottery as well. It is difficult to compare these results to Cannatello, where only a single vessel – a coarseware stirrup jar – has been analysed, yielding a Cretan provenience (Day and Joyner 2005). Still, for the whole of Sicily only a single vessel to date – a LH IIIB-C coarseware amphora from Milena (Caltanissetta) – has yielded a local provenience result (Jones and Levi 2004: 171-72), which would seem to indicate that the level of production of Late Helladic pottery at Broglio was not practiced on Sicily in general, or Cannatello in particular. The twelve imported vessels analysed at Broglio do cover the full LH IIIA – C spectrum (Vagnetti 1999: 143), indicating that even after the establishment of locally produced Aegean-looking wares, actual imports still circulated to the site.

Thus Broglio di Trebisacce has yielded approximately six hundred more sherds than Cannatello, covering a longer time period, and can boast a more plausible interpretation of the actual presence of Aegean agents, be they traders or potters. Nevertheless, even in this well-connected scenario, there is no attempt by the excavators at Broglio to interpret the site as a Mycenaean emporium or colony. It is a local site, where the significant amount of Aegean-looking pottery still only constitutes a small amount of the entire ceramic assemblage. At most, investigators will speak of systematic, seasonal contacts, and perhaps a local appropriation of certain food storage techniques or agricultural improvements, as a result of the material connection to the Aegean (Vagnetti 1999: 149), not of a Mycenaean controlled site, nor of an Aegean acculturated population.

Any interpretation of Cannatello as a Mycenaean emporium, whether it assumes an eastern Mediterranean settled presence and control, or just the systematic commercial exchange with seasonal traders, relies upon the belief of the direct presence of foreign ships and foreign agents landing on the shore near Cannatello. Such a scenario is promoted in the narrative of directed, long distance shipping, often framed within the idea that these eastern ships were on their way further west, to Sardinia and perhaps the Iberian peninsula, seeking metals (De Miro 1999b: 449). Their specific presence at Cannatello is interpreted as a desire for access to the central interior valleys of Sicily, to exploit mineral resources like alum or sulphur (De Miro 1996: 1000). Alum was used for tanning and dyeing in the ancient Mediterranean (Blake 2008: 8), while sulphur was used in metallurgy and viticulture (Castellana 2000: 167). Here we see the typical interpretation of foreign materials in Sicily in terms of foreign motivations and activities, with no engagement with local responses to the encounter, or local motives for promoting or maintaining such contact.

While the presence of Nuragic pottery at the site does seem to put Sardinia into the picture, it still does not allow us to specify the agents of mobility involved. Was Cannatello, or at least its now missing harbour centre, a meeting place for people coming from the eastern Mediterranean, Malta, Sardinia, and other parts of Sicily? It was centrally located on the south coast of Sicily, and therefore easily accessible for Maltese or Sardinian ships, and Sicily's central position in the Mediterranean certainly made it a potentially convenient stopping point for longer voyages east or west. In this, the geographic position of Cannatello's associated harbour is not dissimilar to the position (and perhaps role performed) by Kommos in southern Crete. Cannatello is also well placed for access to the interior via river valleys, and in this De Miro's ideas about the exploitation of mineral resources may be valid, even if his assumption of the foreign management of this exploitation is misguided. Given its position on an elevated plateau 1.5km from the shore, and the security indicated by its thick wall, the idea expressed in section 3.4.1, of Cannatello actually representing a fortified storage compound for goods in transit (both going to, and perhaps coming from, the interior) is an attractive one. It is somewhat validated by the fact that the eastern Mediterranean pottery is dominated by closed shapes (stirrup jars, amphorae) associated with transportation and storage (Vianello 2005: 112). The idea that Maltese traders may have been attracted to certain sites in Sicily due to the availability of Aegean merchandise (Tanasi 2008: 85-86) may be somewhat validated by the situation at Cannatello, although the specific chronological relationship between Borg-in Nadur and Late Helladic pottery would need to be known before insisting upon such a scenario. It would be better to express the situation as one where all traders were attracted by the scope of exotic materials available at the site, not to mention the availability of Sicilian products themselves.

The two cases explored above, which questioned the ideas of Mycenaean or Cypriot presence and control at Antigori and Cannatello, illustrate the difficulty in extrapolating the agents of mobility from the distribution of foreign material in the central Mediterranean. When interpreted from the local, consumption perspective, the binary opposition of local versus foreigner is overly simplistic, as it depends upon the physical presence of foreign agents of exchange, itself a by-product of never separating foreign objects from foreign people. Even labelling materials as 'Mycenaean' or 'Cypriot,' can be a questionable endeavour, as such objects do not intrinsically express corporate identity. While they may be used by specific groups 'back home' to express such an identity, when an object is removed from such contexts (like Aegean pottery in Sicily or oxhide ingots in Sardinia), these associations are often lost. At most, such objects may be perceived as

foreign and exotic. Their new consumers, however, are not trying to be 'Mycenaean' or 'Cypriot': such terms may well have been meaningless to them. In the next section, the concept of hybridisation is explored as a contrary interpretation to the acculturation of central Mediterranean societies, as it relates to discrete practices noted in the case studies presented in the past two chapters.

5.3 The Intensities of Hybridisation in the Central Mediterranean

When one takes a closer look at the meanings and uses given to specific imported goods within specific 'local contexts' or 'realities,' one often finds that the goods have been transformed, at least in part, in accordance with the values of the receiving culture" (Howes 1996: 5).

So far I have discussed the consumption of foreign materials, and how investigating such materials within Sicilian and Sardinian contexts can indicate that different meanings were assigned to exotica to conform to local desires and expectations. This does not mean, however, that the consumption of such new materials had no effect on the material culture or social practices of the communities involved. In discrete instances, particular changes in material practices can be detected in the archaeological record, which could be interpreted as instances of hybridisation. In the theory chapter, I discussed the benefits of such an interpretive framework, particularly when compared to acculturation. Hybrid mixings also occur at different modes or intensities, depending on the type of cultural encounter involved. Below, I discuss three hybridisation scenarios: hybrid production methods; hybrid practices; and hybrid identities.

Hybrid production methods are perhaps the easiest to detect materially. All that is essential is observation of the objects involved, and some knowledge of the constituent 'ingredients': both traditional products and methods, and the foreign materials or techniques that combine to produce the hybrid object. The finished product is then 'read' as a combination of these distinct influences. More difficult to assess are the agents involved in the transmission of finished products (as outlined in 5.2 above), and how such technologies (if any) were transferred. In section 5.3.1 below, so-called Aegean derivative pottery in Sicily, *ceramica grigio-ardesia* at Antigori, and the central complexes at Thapsos are argued as instances of hybrid production.

A hybrid practice refers to the situation where new materials (hybrid productions or 'pure' imports) lead to the introduction of new behaviours. Unlike an anthropologist investigating the consumption of Barbie dolls in Yucatan (Macdougall 2003), however, we cannot directly observe ancient communities 'in action.' The meanings of new materials

and locals' attitudes towards them, therefore, can be obscure. This is particularly challenging when dealing with prehistoric societies, where no written records exist to assist in assessing such meanings and values. We are obliged to draw conclusions about new practices based on either their archaeological contexts, or ideas about usage that we can glean from the materiality of the object itself. Context is more important than any physical alteration to the object itself: as discussed in section 5.1, an imported object that has not undergone any detectable material change can still have a considerably different significance or purpose for the consuming society than the producing one. In the case studies presented in the data chapters, it was remarked how specific contextual information is often difficult to come by, further complicating any attempts to posit hybrid practices. The presence of hybrid objects may provide a small clue to new, changing practices, although they also may simply refer to developing tastes. Neither interpretation, however, is mutually exclusive: a change in taste can coincide with a change in practice. Because the contextual information is sketchy, however, some caution must be exercised in not assuming any wide, sweeping changes to the functioning of local communities.

The most intensive form of hybridisation involves the creation of hybrid identities: when the mixings of materials, practices, and peoples actually leads to a fundamental shift in the way that consumers of such materials, and performers of such practices, define themselves. Such hybrid identities can refer to social vectors of identity, such as a fundamental shift in the criteria for belonging to an elite class, the behaviours associated with a particular gender group, or attitudes towards the roles of persons belonging to different age groups in any given society. More commonly interpreted, however, especially for colonial encounters or large scale demographic shifts associated with migrations (i.e. situations involving persistent co-presence) is the hybridisation of corporate identities: a more encompassing definition change for society at large, making them distinct from both other neighbouring corporate groups, as well as from the constituent populations which 'created' them (van Dommelen 2005: 117; Vives-Ferrándiz 2010: 191).

For each of these scenarios, it becomes increasingly difficult archaeologically to interpret processes of hybridisation in the central Mediterranean during the Middle and Late Bronze Age. Hybrid productions (5.3.1) are relatively straightforward to interpret, and are often presaged by the ambiguity researchers have felt over precise origins of influence. Hybrid practices (5.3.2) are significantly more difficult, given our inability to directly observe ancient societies, and the availability of reliable contextual information. Nevertheless, there is enough contextual data to propose possible adaptations in communal

behaviours at Thapsos, and with new analyses of foreign pottery at Cannatello in the works, it may soon be possible to suggest hybrid practices there as well. It is inappropriate, however, to interpret hybridised identities (5.3.3) in Sicily or Sardinia for the time period under investigation. The intensive level of co-presence necessary to generate such fundamental definition shifts is simply not evident in the material record. This is perhaps the greatest failing of the eastern Mediterranean acculturation framework: its insistence on such a fundamental change to the consumers of Aegean or Cypriot materials, derived from a small amount of data, and a lack of engagement with local contexts and local value systems.

The consumption of Barbie dolls in Mexico, outlined in Chapter Two, is a much better analogy for the effects of the object diasporas upon central Mediterranean communities during the MBA and LBA. The dolls themselves are hybrid productions: they physically reference North American Barbies, but do not imitate them. The social practices associated with the Mexican Barbies also show a combination of North American-style role-playing with the dolls, as well as the incorporation of these figures into fully Mexican/Yucatan contexts, such as their use in the *quince años* ceremony (Macdougall 2003: 268-69). What Barbie dolls do not represent, however, is the Americanisation of the girls who use them. In fact, with the incorporation of traditional, regional dress, and the recognition of these dolls as emblems of traditional Mexican womanhood (i.e. with a stronger focus on the family and the maternal, and not North American Barbie's representation of "liberated career woman" – Macdougall 2003: 258), the appropriation of Barbie into Yucatan society actually promotes both traditional corporate definitions and traditional gender role expectations.

5.3.1 Hybrid Production Methods

The first material expression argued here to be a hybrid production is the so-called Aegean derivative pottery seen in the Thapsos facies. While this label may accurately reflect a possible source of inspiration for such pots (figure 3.13), it also has the unfortunate, acculturative insinuation of Sicilian society trying to be more Aegean. This is not an incidental association: those promoting a Mycenaeanisation framework explicitly wish to combine the idea of foreign influence in this derivative ware with the transformative effects of a Mycenaean presence in Sicily (Tanasi 2009: 51-52; D'Agata 2000: 62). In a more neutral, descriptive analysis, this ware involves the incorporation of some formal elements, basic overall shapes, or figural motifs derived from imported pottery, but made by hand, and finished with the decorative techniques and typical dark colour that Sicilian

consumers would have recognised as traditional. For the proponents of acculturation, this failure to reproduce Aegean-looking pottery accurately is due to a lack of technological know-how, rather than any conscious rejections made by local potters (Tanasi 2005: 563). This has also been interpreted as reflecting a different contact situation than the one in southern Italy, where both derivatives and direct imitations are known. In the latter region, the presence of itinerant Aegean potters is interpreted, while in Sicily only Aegean traders are proposed (Jones *et al.* 2005: 543). From this perspective it is the ignorance of Sicilian potters that is responsible for the derivative ware, not the need to accommodate local consumers.

One hint that we are dealing with more than just straightforward emulation or influence, however, is the ambiguity noted in some of the forms involved, and the specific Aegean shapes implicated in their rendering. For example, D'Agata (2000: 73-76) compared the two handled bowl (or cup) on raised base to the LH IIIB shape FS 284, while Alberti (2004: 132-33) felt a closer parallel could be made to the Furumark 279 deep rounded bowl with horizontal handles (see figure 5.5, p. 234). Similarly, D'Agata (2000: 71) proposes both an Aegean and a Cypriot prototype for the rendering of the derivative tubular-spouted jug (see figure 5.6, p. 236). Regardless of which interpretation is more 'correct,' such ambiguity exists because the Sicilian pots derived do not perfectly resemble any eastern Mediterranean prototype. D'Agata (2000: 74) hints at the active decisions made by local Sicilian potters when she speaks of certain formal elements being "translated" into the local ceramic vernacular. Such an act of translation is here argued as a negotiation between Sicilian producer and Sicilian consumer, resulting in a hybrid object. The practices associated with this bowl were considered to be more appropriately performed with materials that appeared to be traditional. This idea of a changing local practice is investigated in 5.3.2 below.

The other feature interpreted as representing an Aegean influence on Sicilian pottery is incised figural decoration. Such decoration also represents hybrid production: a foreign decorative idea (figural representation) translated into the traditional Sicilian finishing technique of incision, instead of painting. One example of this intrusive technique is seen on the back plate of the lebetiform pedestal basin from Complex B (figure 5.3), which has birds carved upon it (Voza 1973b: 141-42). As mentioned in section 5.1.1, such figural motifs are found on only six vessels at Thapsos. This may suggest a quick rejection of this feature by local consumers, or it may simply reflect the limited exposure to such motifs on

actual imports. It has been noted that the vast majority of Aegean pottery in the central Mediterranean displayed abstract patterns, not pictorial representations (Blake 2008: 9).

When moving to the LBA in Sicily, and the Pantalica North style of pottery, further shapes are argued to represent eastern Mediterranean influences (Tanasi 2004: 338-41). As wheelmade technology has now been transferred to Sicily, the actual derivative shapes are more similar to the proposed eastern prototypes, as can clearly be seen when comparing



Figure 5.3: Bird motifs incised on a pedestal basin back plate found in Complex B at Thapsos. (Voza 1973b: 143, fig. 5).

figure 3.13 to 3.17. The most glaring feature of these Pantalica North derivatives, however, is the persistent resistance to painted finishes. This would seem to challenge the idea that it was a lack of technology transfer that prevented MBA Thapsos potters from painting their Aegean derivative pots: in the following period, when certain extra insular technologies had been adopted (and I would argue that wheel throwing or shaping is a more difficult skill to master than painting), there is still a conscious, active rejection of Aegean finishing techniques. When painting does re-appear as a finishing technique in Sicily during the

Cassibile period, the plumed style motifs are derived from the Aeolian Islands and the Italian mainland, not the Aegean.

Another ceramic production in the central Mediterranean that is argued here to be a hybrid practice is the manufacture of grey ware pottery at Antigori. While the attempt at manufacturing Aegean-looking pottery at the nuraghe could be plausibly interpreted as an act of imitation (albeit an imperfect attempt), there seems to be a different idea behind the production of grey ware. It was argued in section 5.2.1 that both the idea to produce Aegean imitations and grey-finished pottery came via a connection with southern Italy, where these practices also existed, and that the differences in specific execution of either of these wares between the Sardinian site and southern Italy was directly related to the identities of the potters. On the mainland it was either itinerant Aegean potters or Italian potters trained by them who were responsible for the execution of these wares. At Antigori, it was local potters without first hand information about proper production techniques, who attempted to make such pottery with only the template of finished imports to guide them. The shapes associated with the grey ware pottery at Antigori, however, did not simply reproduce imported shapes, but involved the production of traditional, Nuragic pots in the new grey finish. In this they approach the mainland practice, where grey ware pottery was fashioned into traditional, *impasto* shapes, but used the wheel-shaping techniques of imported and locally made Aegean wares.

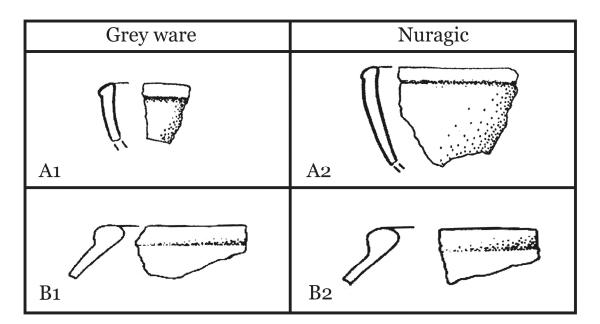


Figure 5.4: Comparison of grey ware shapes from Antigori with traditional Nuragic pottery. A1: grey ware conca bowl from Antigori, Tower F; A2: Nuragic conca bowl from Antigori, Tower F; B1: grey ware olla jar from Antigori, Tower F; B2: Nuragic olla jar from Antigori, Tower F (After Campus and Leonelli 2000: plate 98: 2, 6; plate 322: 5, 15.)

As mentioned in Chapter Four, it was originally thought that the grey ware shapes at Antigori lay completely outside of traditional Sardinian pottery (Ferrarese Ceruti 1985: 606). In section 5.2.1 it was mentioned how both Giardano and Smith drew parallels between grey ware shapes at Antigori and those in Italy. The most recent monograph on Nuragic pottery (Campus and Leonelli 2000), however, has listed five examples of the grey ware at Antigori that fall within local classifications. These include different types of bowl (*conca* and *scodella* –Campus and Leonelli 2000: 129, 184, 200), and *olla* style storage jars (Campus and Leonelli 2000: 500, 514). The grey ware *conca* bowl from Antigori fits in quite closely with other Nuragic examples, including one from the same context and stratum (Tower F, stratum 8) (figure 5.4: A1-2). One of the grey *olla* jars is also well represented in the traditional Sardinian repertoire, and shares the same context (Tower F) with a close parallel, although the Nuragic sherd comes from a lower stratum (9 versus 8) (figure 5.4: B1-2). Another grey *olla* sherd, however, is not particularly close to the Nuragic pots in its class. At the least, it is just as close to the Italian *impasto* and grey ware examples Giardino (1995: 45, fig. 20: 8, 15, 18) uses as comparanda.

Again, the ambiguity over whether grey ware shapes at Antigori should be considered traditional or foreign represents the first indication that we may be dealing with a hybrid form. The uncertainty over whether these grey pots were wheelmade (Giardino 1995: 44), or handmade (Smith 1987: 99) may indicate that we are dealing with both Italian grey ware imports made on a slow wheel, as well as handmade local products. Petrographic and chemical analysis of four grey ware sherds resulted in two being interpreted as local (samples 70, 72) and two that could not be assigned a provenance (69, 71) (Jones and Day 1987: 268, tab. 14.2). These latter two sherds (from Tower F and Room a) could be Italian imports. Like at Thapsos, the fact that the potters at Antigori did not only attempt imitations of the Italian grey ware shapes, but seem to have given some traditional, local shapes this grey finish, speaks of both appropriation and adaptation of the grey ware technique. While I argued that the Thapsos derivative pots might reflect a consumer desire to have foreign features appear local, it is more difficult to suggest what kind of motivations or negotiations are taking place between producers and consumers at Antigori, as the grey finish would have looked no more local than the imported Aegean ware. It may have been simply a matter of taste: they appreciated the grey finish when it was applied to foreign shapes, and decided to employ it on Nuragic pottery.

Just as exposure to foreign ceramics led to local adaptations, cultural encounters in Sicily may also have led to experimentations with extra-insular ideas about the

organisation of space, and the physical design of buildings. This finds its clearest expression in the central habitation zone complexes at Thapsos. While these are typically represented as an indication of the acculturation of Sicilian society by Aegean or Cypriot agents, when looking at the specific execution of these buildings it is clear that local practices and needs were still very much in the minds of those who designed and built them. The arguments which attempt to categorise the occupational phases represented by the central complexes as an instance of eastern Mediterranean inspired proto-urbanisation (Tusa 1999b: 176, 179; Voza 1985: 550) tend to be rather vague, and downplay the inherent organisation of the earlier compound system. While there has been a lively debate regarding what should be considered the archaeological correlates of urbanisation, there is a growing consensus that physical manifestations (such as the spatial organisation of a site) are less important than the variety of functions that a town performs (Osborne 2005: 2). Thapsos, as a representation of only 'proto'-urbanisation rather than 'full' urbanisation, is under no obligation, therefore, to represent a variety of functions to satisfy this rather loose category. I would suggest, however, that the re-organisation of the site into these central complexes speaks less of a site becoming more urban, and more of a site becoming more centrally controlled and administrated (Morris 1991: 40). The question of why it is important to classify Thapsos as proto-urban for those who promote the Mycenaean acculturation interpretation is examined in the final chapter.

It is certainly true that the groundplans of complexes A, B, and C are dramatically different from the northern habitation compounds, or the buildings of any other contemporary settlements in Sicily. As Thapsos is a harbour site, with plenty of supplementary evidence for contact with the wider Mediterranean world, an argument that foreign inspiration is responsible for the new design is worth considering. To assume that they were built because the community at Thapsos wanted to appear more Aegean or Cypriot, however, is overly simplistic, and ignores the local features in their construction, as well as local motivations for the innovation, which have nothing to do with acculturation to Mycenaean or Cypriot norms or cultures. While the plans seem vaguely foreign (an ambiguity that once again brings hybridisation into the interpretive process), the construction techniques used to realise these plans were local. Militello (2004a: 318) outlines several traditionally Sicilian features of the complexes, such as the use of a double facing of small stones, interior benches that resemble those seen in the northern habitation zone huts, the presence of central hearths, and stone supports for timber posts.

One problem with reading too much foreign inspiration into the execution of the central complexes is the partial material record involved: we are only comparing vaguely similar building foundations, and know nothing about their superstructures, which would have been their most visible and conspicuous feature. There is no way of knowing if the finished complexes would have looked similar to an Aegean or Cypriot building, or were plastered, roofed, and otherwise decorated in a manner that appeared Sicilian, in the same way that Aegean derivative pottery looks like Thapsos facies ware, despite the novelty of their shapes. It is still possible to discuss extra-insular ideas about the organisation of space (e.g. the presence of a paved central courtyard, and any activities associated with this space), although even in this local concessions have been made. Complex A incorporated a (presumably older) circular hut (figure 3.35: J), it did not replace it. Any extra-insular ideas about the organisation of these spaces, whose functions are still uncertain, were still filtered through local needs (as represented by the continuity of the circular hut's involvement), local construction techniques, and materials available. Categorising these complexes as hybrid Sicilian buildings, therefore, is a more reasonable interpretation given the ambiguity of the specific source of influence, the persistence of local practices in their design and execution, and our present ignorance of the actual appearance of these structures in elevation.

In the narrative of Aegean acculturation, the combination of foreign and local features in these complexes has specific identity implications: these buildings are said to have been planned by Aegean architects, but constructed by Sicilian builders (Tomasello 2004: 206; Militello 2004a: 318). There are several problems with this rather expansive interpretation. To begin with, as mentioned in section 5.2, the actual presence of Aegean or Cypriot peoples at Thapsos, be they merchants, potters, or architects, has not been demonstrated. The spread of foreign materials and influences can and did occur independently of the people associated with these features. How can we determine if the central complexes were planned by a foreign architect, or simply based on observations by mobile Sicilian agents in the eastern Mediterranean or elsewhere? Secondly, while the complexes may represent a new organisational idea, they are still not complicated structures, and are remarkably simple when placed alongside the town plans of the eastern Mediterranean sites to which they are commonly compared (figure 3.25). The actual need for any 'specialist' architect, therefore, is not necessary. Even if we accept Tomasello's (2004: 199) hypothetical division of the central habitation zone into discrete insulae (figure 3.36), this overall plan is still not rigidly symmetrical or orthogonal, and actually seem quite similar in concept to the northern habitation zone compounds, which in Alberti's

(2007: 373) occupational scheme, were still in use at the time. The assumption of a foreign architect planning the central complexes at Thapsos is inevitably a colonialist, *ex Oriente lux* interpretation, where the backward locals of Thapsos require the direct instruction of more advanced eastern artisans.

The assumption of Aegean presence and agency is also brought up with regard to the Anaktoron at Pantalica. Here, however, the interpretation of foreign agency is extended to both plan and execution (Tomasello 2004: 208). This idea of Aegean presence fits in comfortably with Bernabò Brea's (1957: 162-63) long-standing idea that the building represented some Aegean-style princely palace, and the label Anaktoron was given to establish a Mycenaean ruler connection (i.e. house of the wanax/anax). It was mentioned in Chapter Three, however, that regardless of the identities of the builders or users of this building, its grandiose nature has been seriously exaggerated. Furthermore, assuming Aegean agents in both its plan and construction begs the question: to what end? While Thapsos is conveniently placed on the coast, and may well have had foreign ships and peoples visit from time to time, this seems an extremely unlikely scenario for an interior necropolis like Pantalica. The argument that an Aegean unit of measure can be seen in the Anaktoron's dimensions (Tomasello 1996: 1599-1602) is unconvincing, and is reminiscent of other erroneous construction attributions in prehistory, such as Inigo Jones' claim that Stonehenge was a Roman building based on Tuscan proportions (Darvill 2007), or that it betrayed Mycenaean architectural influences (Harding 1984: 8).

While it might be tempting to analyse the so-called *tholos* tombs as hybrid Aegean-Sicilian forms, it seems much more likely that they are essentially Sicilian, reflecting a long developing local tradition of rock-cut tomb construction. Like the Anaktoron, the interior location of most of these tombs makes the direct presence of foreign tomb builders unlikely. Moreover, the rather loose nature of the defining features of the *tholos* category, and the great variety of forms this tomb type takes in execution, both in Sicily and the Aegean, would seem to challenge its usefulness as a classification. Leighton's (1999: 168) comments that the common features of both Sicilian and Aegean tombs could point to convergent funerary ideologies between these regions, while a more measured approach to the data than simply assuming a foreign-adopted burial type, are still too accepting of foreign influence. Those who see a clear Aegean inspiration in Sicilian *tholos* tombs tend to ignore the question of why MBA Sicilian societies would want to emulate the burial practices of their trading partners, or conversely, why foreign traders would encourage such a practice. Despite Leighton's suggestion of a deeper ideological exchange, it is clear

that many of the interior areas where *tholos* tombs are found would have had little direct contact with extra-insular peoples. Daniel (1941: 46-47), in his early study of the spread of monumental tombs throughout the Mediterranean, did address the question of why indigenous communities would wish to emulate the burial practices of those with whom they had exchange relationships, and concluded that such sporadic, commercial relationships were insufficient to produce changes in such a culturally important practice. While he hypothesised that the spread of monumental tombs must therefore indicate the colonisation of foreign tomb builders (Daniel 1941: 48-49), such an interpretation is not supported by the evidence in Sicily.

Instead, as stated above, *tholos* tombs are likely a local feature of Sicilian MBA society. As Whitehouse (1972: 276) commented four decades ago, the chronology better supports the rock-cut tomb (of any kind) as a central Mediterranean tradition, and Albanese Procelli's (2003b: 57) suggestion that developing tomb designs reflect changes in the design of domestic architecture seems a more likely scenario. More fruitful areas of discussion for assessing foreign influence in burial practices could be the LBA adoption of cremations in jars, or the (possibly also LBA) instances of jar inhumations seen at Thapsos. These two burial types were completely new, however, and not really candidates for a discussion of hybrid practice. The only other seemingly non-native practice is the instance of a trench containing four skeletons dug into the floor of the Tomb 29 at Thapsos (Orsi 1895: 116). The rarity of this occurrence, however, and its presence on the coast, in a site with ample evidence for extra-insular contact, may actually signify the burial of non-Sicilian peoples rather than any local, hybrid funerary practice.

It is surprisingly difficult to analyse bronze objects and metallurgical activities from a hybridisation point of view, because contact, experimentation, and the mixing of forms seem to be the natural state of the production and consumption of metals in the Middle and Late Bronze Age. As Harding (1984: 44) noted, many of the regions where advanced bronze production occurred in Europe were not ones rich in ore sources. For these regions, involvement in metallurgy meant involvement in mobility networks, where objects, technologies, and perhaps metal smiths circulated. In such an environment, the difficulty is not in seeing any foreign influence, but in determining what features should be considered local and traditional, and what foreign and innovative.

For example, it was noted in Chapter Three how Sicilian and mainland Italian bronze work was so similar that making the distinction between a local Sicilian object and an Italian import is impossible for certain forms. This similarity also makes it difficult to

interpret Sicilian-Italian hybrid forms: while contact and an exchange of technologies is certain to have existed, and could well have produced hybrid practices, the finished products do not allow us to disentangle traditional Sicilian features from traditional Italian ones. It is relatively straightforward to see both Sicilian and eastern Mediterranean features in the Aegean derivative pottery at Thapsos, because we are dealing with two quite distinct pottery traditions. We are also dealing with a lot more evidence: there are thousands of known sherds of Thapsos facies pottery, and much more of Late Helladic pottery, and the developments in these two independent traditions have been well charted archaeologically. With finished bronzes the data are significantly circumscribed, and the origins of particular forms often ambiguous. This can be seen in the terminology employed for bronze typologies, such as the Thapsos-Pertosa sword (Jung 2009: 130), which incorporates both a Sicilian and a mainland Italian site in its label to address the ambiguity over precise origins.

5.3.2 Hybrid Practices (Usage)

While hybrid productions are the easiest to identify in archaeology, in isolation they are the least significant form of cultural mixing. While producing new objects by drawing on both local and foreign materials and technologies is in the strictest sense a hybrid 'practice,' this term more properly refers to how new forms (hybrids or imports) are incorporated into the social life of the community after production; in other words, the activities that involve material culture. To consider only hybrid objects and not any associated practices "would not only be artificial but also, and more importantly, beside the point" (van Dommelen and Rowlands forthcoming). In other words, there is a need to go beyond hybridisation as a descriptive tool for specific objects, and recognise the possible deeper implications that mixed objects or imports have on social practice. Hybrid practices add weight to any notion of the impact of cultural encounters; when restricted to analysing new objects in isolation, the interpretation cannot move much further than a discussion of developing tastes. Interpreting a hybrid practice in the archaeological record, however, is not as straightforward as identifying a hybrid object: as mentioned in the introduction to this section, we must rely on context, or the materiality of the objects themselves, in order to posit possible mixed practices. As contexts for Thapsos, Cannatello, and Antigori are only cursorily published, and there was no sustained co-presence of foreigners and locals at these sites, any proposed hybrid practice should be considered localised, tentative, and limited. This is counter-intuitive to the Aegean acculturation model, where such contacts

are portrayed as physical and intense, and the change in social practices, and even social structures, are considered to be broad, certain, and significant.

One clue that there may be a hybrid activity in the archaeological record is the existence of a hybrid product, such as those discussed above. Such material mixings could suggest a change in use, particularly if the adaptation is thought to have been stimulated via outside contacts. At the very least, suggesting there is no new practice demands the explanation of why a hybrid object was necessary in the first place (i.e. why a traditional object was no longer sufficient to perform a continuous practice). While a simple aesthetic change may only refer to dynamic tastes, this does not necessarily preclude the possibility of a new, mixed practice as well.

My first proposal for a hybrid practice is the use of Aegean derivative ware at Thapsos. Contextually, these objects are largely found in the tombs, although there are at least two examples from the settlements as well (D'Agata 2000: 73; Voza 1973b: 141).



Figure 5.5: Comparison of Aegean shapes and Thapsos derivatives. A: Deep bowl FS 284 from Perseia; B: Furumark 279 deep bowl from Tomb D, Thapsos; C: derivative two-handled cups or bowls from Thapsos, tombs 38, 6, and 1. (After Mountjoy 1999: 151, fig. 39: 296; Voza 1973a: pl. VI: 84; Orsi 1895: pl. IV: 2, 10 and V: 5.)

Particularly prominent in the burials are the two-handled cup or small bowl, which is found in eight tombs (Vianello 2005: 163, 203-204; Voza 1973a: 42-43; Alberti 2002: 175), and the globular jug with tubular spout found in six tombs (Vianello 2005: 163; D'Agata 2000: 71). Both can be plausibly related to an Aegean shape, but also involve critical choices

made by the local potter, which may indicate the adaptation of form to suit local practices, or changes in these practices themselves.

The two-handled cup or bowl (figure 5.5: C) has been compared to the Mycenaean deep bowl (FS 284) (figure 5.5: A) by D'Agata (2000: 73, 75), and to the deep bowl with horizontal handles (Furumark 279) by Alberti (2004: 132-33), an example of which was found in Tomb D at Thapsos (figure 5.5: B) (Voza 1973a: 36). FS 284 does not offer a particularly close shape comparison, and Alberti's suggestion seems more likely on formal grounds, to say nothing of the physical presence of Furumark 279 at Thapsos. In either case, however, the Sicilian potter has created a shape that is distinct, with handles that are much more abbreviated, and a more pronounced collared rim. The most significant difference, however, is in size. FS 284 ranges in height from 9.9 – 15.7cm, and in diameter from 14.9 – 21.4cm (Mountjoy 1999: 128, 143, 150). The Furumark 279 deep bowl from Tomb D measures 11.8cm in height and 18.5cm in diameter (Voza 1973a: 36). The derivative Thapsos shapes are slightly shorter, ranging from 9 – 10cm, and significantly narrower, with a typical diameter of 10 - 11cm. This explains the ambiguity over whether the vessel should be considered a cup or small bowl. Voza (1973a: 42) refers to the example from Tomb A1 as a cup, while Orsi (1895: 97, 123) called the pots from Tomb 1 and Tomb 38 *olletta* (i.e. small, open-mouthed jars). Such ambiguities in classification may be related to the function of these vessels. The derivative cups seem small enough to have been held in the hand, for personal consumption or pouring, while the Aegean shapes are too large. Consumers at Thapsos may have appreciated the shape of the deep bowl, but found that it did not comfortably fit into the traditional funeral ceremony. The smaller derivative cup or bowl, however, is much closer to the size of the traditional dipper cup, part of a funeral 'set' found frequently in Sicilian tombs (Maniscalco 1999).

It is possible, therefore, to suggest that such a cup was used in a similar fashion to the traditional dipper cup. As they lacked the dippers' looping vertical handles, however, these two-handled cups would not have been useful in ladling out any liquids from a pedestal basin. The derivative cups would either have required the dipper cups to act as ladles to fill them, or they should be associated with a pouring jug instead of a basin (see below). Although the association of objects in particular tombs is a difficult task in Thapsos due to the selective publication of finds (especially local pottery), from Orsi's (1895) report we can see that in four of eight contexts where a two-handled cup was found, a traditional dipper cup was also recovered. This could suggest such objects were used together, although in a multiple-burial context this is not necessarily the case. It does seem to

indicate that these two-handled cups did not replace the dippers, even if funerary practice was somewhat altered to accommodate them. In two other burial contexts where two-handled cups have been found there was a pouring jug with incised birds (Tomb 10), and a derivative tubular-spouted jug (Tomb D), both of which could have functioned in conjunction with these two-handled cups, and eliminated the need for a dipper.

The tubular-spouted jug derivative (figure 5.6: A) presents another interesting instance of appropriation and adaptation, which might tentatively indicate a change in funeral practices. D'Agata (2000: 71-73) compares the six Thapsos derivatives to both Late Helladic and Cypriot White Painted 'feeding bottles' (figure 5.6: C-D). While the narrow spout does seem to indicate a certain formal similarity to these eastern Mediterranean pots, the globular body can be directly related to traditional Thapsos jugs (figure 5.6: B). Alberti (2005: 345-46) has posited that these Thapsos jugs are themselves



Figure 5.6: Tubular-spouted jars from Thapsos and potential sources of influence. A: derivative jars from Thapsos, tombs D and 17; B: traditional Thapsos jug from Tomb 22; C: Cypriot feeding bottle; D: Mycenaean feeding bottles FS 160 from Mycenae and Argos, with parallel and perpendicular bridge handles. (After Marazzi and Tusa 2001: 168; Orsi 1895: pl. IV: 11, 18; D'Agata 2000: 72, fig 4: 7; Mountjoy 1999: 123, fig. 27: 181, 184.)

derived from Cypriot Proto Base Ring and Black Slip III prototypes. This seems unlikely, however, as the only Cypriot jugs recovered from Thapsos are Base Ring II and White Shaved varieties, which are not particularly close to the Thapsos shapes. Furthermore, jugs

with long necks and vertical handles attached to the neck and body are known in Sicily from the EBA (e.g. Tusa 1999a: 410-11, figs. 55-56). For the analysis that follows, it is the spout that is considered to be the intrusive feature to the Thapsos repertoire.

Most of the Thapsos tubular-spouted jugs have their handles placed vertically from the neck or rim to the mid-body of the vessels. This is somewhat similar to the Cypriot feeding bottles (although those handles tend to be more abbreviated), but quite distinct from the Aegean examples (FS 160) which have 'bridge' handles astride the mouth of the jugs. The most significant way that Thapsos potters have deviated from any feeding bottle prototype, however, is in the placement of the spout itself. All of the prototypes that D'Agata illustrates (2000: 72, fig 4.4-8) have the spout placed on the body directly opposite the handles, or in line with them in the case of the basket-handled jugs. The Thapsos derivatives, however, have the spouts placed at an oblique angle to their vertical handles. Alberti (2002: 126) cites FS 160 feeding bottles with perpendicular spouts as possible influences (figure 5.6: D, right), although none have been found in Thapsos, and only two examples are known in the Aegean (Mountjoy 1999: 122), which is four fewer than the amount of tubular-spouted jars recovered from Thapsos alone. In fact, no feeding bottles of any type have been found in Sicily, meaning that if the Thapsos potters have based their derivative jug on these eastern Mediterranean shapes either the prototypes have not survived in a Sicilian context, or the potters were exposed to them elsewhere. Two stirrup jars have been found in the tombs at Thapsos, which also have spouts projecting from the body of the vessel (albeit higher up on the shoulders). It is possible, therefore, that local potters were influenced by their exposure to these stirrup jars when designing the tubular-spouted jugs. The stirrup spouts are set at a perpendicular angle to their doublelooped handles (e.g. Orsi 1895: 129, fig. 42), perhaps another clue that these are the appropriate inspiration for the Thapsos derivatives.

If these Thapsos jugs were derived from a feeding bottle prototype, then the placement of the spout at an oblique angle would indicate that we have moved beyond the appropriation of an extra-insular feature, and actually have a functional adaptation. This placement would seem to make pouring more difficult, although the narrower spout would have produced a tighter, more controllable stream than the traditional long-necked jugs. Controlled pouring is also considered to be a benefit of the stirrup jars (Vianello 2005: 33), although these are more generally classified as storage rather than serving vessels (van Wijngaarden 2002: 15). This ability to have a more focussed, steady pour may reflect a developing funerary practice. As with the two-handled cups, associated materials are

poorly published for the six tombs that have produced these tubular-spouted jugs; three of the tombs (7, 17, 27), however, also had high-footed basins (two over a metre high), which could be used in conjunction with the jugs for some sort of hand-washing/ablution activities. This might suggest a new feature of the funeral ritual at Thapsos (and one not related to the Aegean use of stirrup jars). In Tomb 48, the spouted jug was found in context with a traditional Thapsos jug, which could indicate these derivatives were intended to augment traditional funeral practices, rather than replace them.

Of course, a hybrid object does not need to involve a new, hybrid practice. This appears to be the case for the production of grey ware pottery at Antigori. The shapes produced in grey finish, as mentioned above, were largely standard Nuragic ones, and appeared in close context with more traditionally finished pots in Tower F. This would seem to indicate a continuity of practice, and would certainly refute any notion that grey wares were replacing Nuragic pottery. The grey finish, which does not change the physical functioning of the pots upon which it is used, may inevitably have been an aesthetic choice, reflecting a new taste in dining wares at Antigori. Interestingly, this Italian practice of creating a grey-burnished finish lasts slightly longer than the use of Aegean-looking pottery at the site, perhaps another subtle clue that direct contact was with the Italian mainland, and not Aegean agents. It is actually much more difficult to suggest any hybrid practices in Sardinia in the LBA, particularly ones that could have been inspired by contact with the eastern Mediterranean. This is geographically logical, of course, as Sardinia is more isolated from the eastern Mediterranean than Sicily. There could be significant hybrid practices related to the use and incorporation of new metal forms in Sardinia, but just as the interpretation of hybrid productions of bronze objects is difficult, so too hybrid practices. How do we disentangle the 'local' from the 'foreign' when the mix of styles, techniques, and objects is fairly ubiquitous?

A second proposal for hybrid practice also comes from Thapsos, and is hinted at by the radical new design represented by the central habitation area complexes. Given the significant difference between these complexes and the northern habitation zone compounds, a possible mix of practices and ideas about the organisation of space could be interpreted. While the specific functions performed in the complexes are uncertain, their material features make it possible to suggest functional capabilities. For example, the overall size of these complexes is greater than the compounds, and the individual architectural components are significantly larger. The largest rectangular building in the northern habitation zone has approximately 13m^2 of interior space. The complexes,

however, have much larger architectural units, the biggest in Complex A having an interior area of approximately 180m^2 . This is Room A (figure 3.35), which is very similar in dimension to the three other rooms that lie along in the same axis to the southwest. These greater dimensions could mean increased storage capacity (and pithos fragments have been found in the complexes –Albanese Procelli 2003b: 105), or, for rooms with benches along the walls, the participation of more individuals in any activities situated there.

These changes might speak more of an intensification of traditional practices, however, not necessarily hybrid ones. If we follow the suggestion that the complexes represented a more formal space for interactions with outsiders (Doonan 2001: 179-80), there may be room for positing extra-insular inspiration in the re-organisation of such spaces. This is not to suggest that we should be looking for close formal comparanda for the central complexes, which have not found any consensus (e.g. figure 3.25), and are based on a presumption of Aegean architects present. The reason a close parallel cannot be found is that one does not exist: the structures at Thapsos were purpose-built to satisfy the specific local needs of the community. They were not constructed to an Aegean-imposed pre-existing plan, relying on foreign units of measure (contra Tomasello 1996: 1599-1602). Instead, the idea of a more structured, formal-looking space may have grown out of common responses to port situations, and information shared among people involved in overseas exchanges. From such a perspective, it is not appropriate to speak of Sicilian-Mycenaean or Sicilian-Cypriot mixings, but of Mediterranean maritime ones. It is the abstract idea that a more formal setting might encourage ships to your harbour, perhaps away from other competing ones, and of being, to a certain extent, accommodating to the needs and expectations of seafaring merchants, which may have inspired the construction of the central complexes. In such an interpretation, it is possible to suggest the existence of mixed practices in such spaces.

At Kommos in southern Crete, a harbour that was contemporary with Thapsos, and not too dissimilar in size, there is a similar formalisation of buildings seen in the LBA. The Middle Minoan site was expanded to include six long, narrow buildings, which were open at the sea-facing end, and interpreted as ship sheds (Shaw 2006: 39). These sheds were an appropriate response to the needs of shipping at Kommos: a more permanent, secure, and sheltered construction for a site whose beaches were exposed to the open ocean. At Thapsos, with its two natural harbours, such a building would be unnecessary. Instead, the complexes are more conveniently placed closer to the shores of these harbours, especially the much larger southern one, which would be useful if such buildings were involved in the

(more secured?) storage of goods coming off the ships (as the presence of Maltese pottery in complexes A and C might indicate), as well as interacting with outsiders in a more formal setting. The northern habitation zone is now believed to have been continuously inhabited even after the construction of the complexes (Alberti 2007: 369), and the compounds in the northern zone more plausibly interpreted as 'domestic' spaces (i.e. in that they look more like traditional Sicilian and central Mediterranean settlements). The separation between these two areas at Thapsos, therefore, may have satisfied a local need for privacy, and the needs of both the residents and outsiders for greater formality.

The presence of the lebetiform pedestal basin with incised bird motifs in Complex B may have been and ideological tool in any negotiations with foreign merchants. On the one hand, it showed a community that was open to contact, and willing to experiment, while on the other, it emphasised the centrality and importance of local customs, perhaps even inviting outsiders to take part in them. In this sense, the mixed practice may have involved mixed participants. The new design of the complexes themselves could have conveyed a similar message of a community that was progressive and accommodating, while the traditional building techniques (and perhaps traditional superstructures or methods of roofing) still stressed the continuity and dominance of the communal identity. Far from any message of being more 'Mycenaean,' which was likely a meaningless concept to both locals and foreigners, the execution of these central complexes, as with the assemblages in the tombs, expressed both the openness and stability of a community involved in maritime exchange.

5.3.3 Hybrid Identities

If the eastern Mediterranean acculturation model simply insisted that contact with the Aegean or Cypriot worlds led to new material expressions, and in some specific instances, perhaps a new way of doing things for central Mediterranean societies, then it would be relatively unassailable. Indeed, this is fundamentally what is promoted in the consumption and hybridisation interpretations advocated here, albeit without any insistence of direct, physical contact in every situation. The 'Mycenaeanisation' interpretation, however, does not stop at describing value-neutral material changes: there is an unequivocal insistence upon the superiority of foreign materials, and a belief that the impact such contacts have are profound. Its proponents feel no need to address why local communities would want to become more Aegean or Cypriot: the desirability of these superior foreign materials and practices is thought to have been self-evident to Sicilians and Sardinians. Any material changes, therefore, have implications for how islander communities defined themselves. In

Sicily, for example, such changes have been interpreted in "every feature of indigenous material culture," to the extent that when contact with the east subsides it leaves a "cultural void" (Tanasi 2009: 51, 53), almost as if there were no traditional materials or practices for these communities to fall back on. In reality, of course, there is ample material continuity in the archaeological assemblages of sites like Thapsos or Antigori, even if such traditional features tend to be under-reported.

Fundamental shifts in corporate identity are not common occurrences, and would have required a more intense level of co-presence than could plausibly be reconstructed from the local assemblages in Thapsos, Antigori, or Cannatello. All other sites in Sicily and Sardinia where eastern Mediterranean goods have been recovered – and unlike the above mentioned sites, found in very small amounts – are not distinct in any way from contemporary sites that lack foreign objects. This would seem to indicate that the consumption of small amounts of foreign materials had a rather circumscribed impact on such communities. More discrete social identity vectors, like class, gender, age, or occupation, can also be resistant to significant shifts in definition. While it could be argued that the consumption of foreign exotica as grave goods at a site like Thapsos has identity implications, reflecting the deceased's access to such materials, this may only be a small aspect of an occupational identity (i.e. someone involved in maritime exchanges), or a class distinction (i.e. someone with enough wealth to acquire such rare objects), rather than any wide sweeping notion of being more Mycenaean.

If there is a corporate identity implication that can be read into the extra-insular connections seen in the central Mediterranean, I would argue that it is one that actually more strongly emphasises the local identities of the consumers. As mentioned in Chapter Two, when foreign objects move beyond the circulation of their producing society, they no longer "substantiate" the culture in which they are found (Howes 1996: 2). Thus, having access to objects from the Aegean, Cyprus, or Malta does not make the consumers of Thapsos more Aegean, Cypriot, or Maltese, although it may be a way of making them distinct from competing Sicilian communities. Moreover, a hybrid production like Aegean-derivative ware did not make the community of Thapsos more Aegean: in the conscious, deliberate rejection of the most overt feature of Late Helladic ware (i.e. painted finish), and the naturalisation of the finish to look traditionally Sicilian, the identity being stressed is actually the local one. These pots, despite any extra-insular influences appropriated in their manufacture, have become Sicilian, in the same way that the use of Barbie in the Yucatan peninsula promotes traditional Mexican values of womanhood and the family. If the

community of Thapsos simply wanted to acculturate to a more Aegean way of life, they could have produced direct imitations of the Late Helladic imports to which they were exposed. In fact, a local identity is stressed more consciously in the production and use of so-called Aegean derivative ware than if Thapsos consumers simply used local pottery: active, deliberate compensations have occurred to make certain that these objects are regarded as local.

In Antigori direct imitation of Aegean pottery was attempted, although in a completely Nuragic context, and it does not seem to be the case that the elites of Antigori intended to make themselves more Mycenaean, an identity that almost certainly would have been meaningless to them. Such local production speaks more of a taste for such pottery at Antigori – and perhaps in its immediate environs (as locally produced Aegean ware at nearby Nuraghe Domu 'e S'Orku might indicate) – and the fact that it was not sufficiently available through exchange. Furthermore, its contextual association with local and grey ware dining and serving shapes would seem to indicate that such imports and imitations were incorporated into traditional practice. The appropriation of Aegean pottery is clearly seen in the repair of an Aegean krater, using a lead strip (Ferrarese Ceruti 1985: 609). In this instance a broken, but still valued object is treated in exactly the same manner as a broken Nuragic vessel would have been. When Late Helladic imports ceased arriving to Antigori, the practice of imitating them also stopped: they were no longer relevant emblems of the exotic, and the desire to continue using them (i.e. the taste for such pottery) dissipated, making the need to produce local copies redundant.

It is clear, therefore, that while hybrid productions can be plausibly interpreted in the archaeological record of the Sicily and Sardinia in the MBA and LBA, and discrete hybrid practices more tentatively proposed, it is completely inappropriate to speak of hybrid identities (corporate or social) for these societies based on the amount and types of contact that existed. For such fundamental shifts to occur, there would need to be the significant, persistent co-presence of islanders and newcomers, whose more daily interactions could produce the 'third space' where such hybrid groups are encountered. In Sardinia this does not happen until the 1st millennium BC colonial movements associated with the Phoenicians, while in Sicily such a process may have its origins in the movements of Italian peninsular peoples into the northeast of the island at the end of the LBA, but cannot be plausibly reconstructed archaeologically until the Iron Age (Albanese Procelli 2003b: 23).

The analyses provided in this chapter has shown that interpreting foreign materials and influences from a local, consumption-based viewpoint leads to markedly different conclusions about the cultural encounter these objects represent. Rather than a unified narrative of Aegean or Cypriot activity in the central Mediterranean, motivated by the desire to access raw materials, and leading to an Aegean-acculturated society, the data actually seem to indicate different responses to the object diasporas, and dynamic local motivations for contact. The agents involved in the distribution of exotica were diverse, and exchanges happened at different scales, with long-distance, directed shipping likely representing a minor practice. While it is inappropriate to speak of the Mycenaean assimilation or acculturation of local communities in the central Mediterranean, foreign objects and ideas still had the potential to influence discrete material practices in Sicily and Sardinia, such as the proposed hybrid productions listed above. In the final chapter some conclusions are drawn about the cultural encounters that existed in the Middle and Late Bronze Age central Mediterranean, and a brief discussion of the types of discourse that allow scholars to maintain the concept of Mycenaean or Cypriot acculturation, a framework that still dominates the characterisation of these encounters.

6 Conclusions

Now that some of the benefits of interpreting cultural encounters through the lens of local contexts and local systems of meaning have been illustrated, this study concludes with an examination of the types of discourse used by those who maintain the central importance of eastern Mediterranean presence and influence in Sicily and Sardinia. These discourses tend to create an impression of significant Aegean or eastern Mediterranean features where they do not exist archaeologically, and report subjective interpretations of culture contact as if they were established or unchallenged facts. Following this assessment, I propose a more general and inclusive synthesis of culture contact for Sicily and Sardinia in turn, characterising such contacts from the dominant local voice. Finally, some areas of fruitful future study are proposed.

6.1 Discourses of Aegean-ness and Certainty

Throughout this study I have referred to the traditional Aegeanocentric view of cultural encounters in Sicily, and to the assumed Cypriot impact in Sardinia, and shown that there has been little attempt to draw a distinction between the presence of foreign objects and the presence of foreign agents. I also noted how the inclination to promote the primacy of eastern Mediterranean societies developed out of colonialist biases and diffusionist models that fall under the rubric of *ex Oriente lux*. What may still need consideration is how this excessive insistence upon the Mycenaeanisation of Sicily, or the Cypriot impact in Sardinia, has been maintained in the face of such a small amount of evidence to support it. When looking at the corpus of scholarship characteristic of the eastern Mediterranean acculturation camp, two features stand out: (1) the frequent use of terminology that makes many local features appear 'Greek,' and (2) how interpretations of presence and influence are expressed as certainties.

The use of Greek terms is ubiquitous in Mediterranean archaeology, and its application in certain contexts, such as labelling pottery shapes, is more a matter of convenience than any implication of Aegean influence. Hence, it is not troubling to see references to amphorae, kraters, pyxides, and other vessels: these labels only vaguely suggest common formal elements, and are more typically used to indicate common functions like storage, transportation, or dining. In the representation of central Mediterranean cultural encounters, however, the use of Aegean terminology goes beyond such common usage, and often has specific implications of influence: *tholos* tombs and

tholos nuraghi; dromos entrances; megaron temples; Anaktoron (i.e. house of the wanax); and hecatomb votive deposits. All of these have been applied to Sicilian or Sardinian features to create a greater impression of the presence of Mycenaean or other eastern agents, and the pervasive influences they represent. None of these features, however, has been convincingly argued to represent actual Aegean-inspired developments in the material culture of these islands. Even in the case of so-called 'Aegean-derivative' pottery from eastern Sicily, the label expressly highlights the 'Aegean-ness' of this ware. While the interpretation of influence may be warranted – and this is itself a subjective distinction – such a label downplays the fact that this is still a Sicilian product, manufactured by Sicilian potters, for use by Sicilian consumers.

One of the effects of this Aegean-sounding assemblage of materials is to encourage the search for a 'Mycenaean connection' (Bietti Sestieri 1988) in more and more materials, and consequently, the interpretation of influence where none is present or necessary. The case of so-called Sicilian tholos tombs is instructive here. There is nothing strictly Aegean about these rock-cut tombs, and those who propose the connection have acknowledged that this is not even a particularly dominant type of tomb in Greece. When more Sicilian examples were discovered – more than doubling the amount known in the Aegean – rather than considering the lines of influence to be pointing in the wrong direction, it simply indicated to the Aegeanocentric proponents how much more fully acculturated Sicilian society was to Mycenaean practices (Militello 2004b: 294). Because they have been so accustomed to explaining these tombs in terms of Aegean influence, and literally in Aegean terminology, it becomes conceptually impossible for these scholars to break the link. They no longer see the term tholos tomb as an interpretation of possible influence, but as established proof of contact. Aegean terminology is even used to describe non-material features: Aegean ideologies of burial; Mycenaean trade routes; wanax type chiefdoms. The existence of the discourse itself has become a source of evidence. This is not dissimilar to the type of discourse that has promoted an 'Achaean colonisation' of Cyprus (Knapp 2008: 282-83, 296). The ubiquity of the terminology actually creates an Aegean presence, even when the material evidence is slight and ambiguous.

This narrow focus on possible Aegean influences lends itself to the selective 'cherry-picking' of comparanda from the eastern Mediterranean, regardless of distributional logic. In this study alone, I have noted instances where a connection is made to the Aegean based on only a handful of examples. These have included: tubular-spouted jars at Thapsos – with spouts unaligned with their handles – called Aegean derivatives, although only two

examples of such oblique-angled spouts are known in Greece (Mountjoy 1999: 122); a bird-headed knife and dagger from Pantalica called typical of Aegean production (Tanasi 2004: 342), although only a single Attic example has been found (Bouzek 1985: 147-48); flat trunnion axes, common in Sicily and the Iberian peninsula, but regarded as having Aegean origins (Giardino 1995: 200) with only a handful of uncertainly-dated comparisons (Harding 1975: 184, 186).

Beyond issues of distribution, often comparanda are chosen arbitrarily, merely based on a generic formal similarity, without any consideration of functional differences. Such is the case with Sardinian tholos nuraghi proposed as debased copies of Mycenaean beehive tombs (Guido 1963: 109). While the connection was subsequently rejected on chronological and technological grounds, the comparison should have been considered unlikely from the beginning, as it insinuated Sardinians would have based the most conspicuous feature of their society upon the subterranean funerary practices of a distant culture. More subtle, perhaps, is the case of the central habitation complexes at Thapsos. As noted in Chapter Three, these buildings have been compared to many different structures in the eastern Mediterranean, although such relationships are strictly drawn on formal grounds, namely the broadly similar groundplans of their foundations. There has been little attempt to reconcile common functions between the Thapsos complexes and their eastern Mediterranean comparanda. To be fair, the actual functions of the Sicilian buildings are still obscure: a comparison to domestic buildings in Cyprus could be valid (Tomasello 2004: 203), although it is far from certain that the Thapsos complexes were primarily domestic in nature.

This injudicious selection of Mycenaean or Cypriot materials for comparison brings up one final feature of this discourse used to describe foreign evidence: the fusion of Cyprus and the Aegean as a single contact phenomenon. This not only artificially inflates the 'Aegean' data, but also homogenises the contact situation. Describing a generic process of Aegean acculturation, as if extra-insular contact was with a single, self-aware, sociopolitical unit, has the effect of presenting all exchange with the central Mediterranean as some kind of Mycenaean foreign policy. In reality, a site like Thapsos would have had direct or (more likely) indirect contact with several regions from the east, each with its own aims, and representing a different set of experiences. Even within the Aegean itself, there would have been several independent polities involved in exporting the goods that would eventually find their way to Sicily or Sardinia. The final irony of the discourse of Aegean-

ness is that it is actually unfair to the foreign party as well: whitewashing all extra-insular contact as the agency of a single, homogenised polity.

The second type of discourse used to promote the Aegean connection in the central Mediterranean involves expressions of certainty. The first feature of this discourse is a tendency toward exaggeration. Three typical embellishments will suffice to show the kinds of exaggerations commonly encountered in the study of extra-insular contacts in Sicily and Sardinia:

The foreign origin of the structure of the II phase Thapsos settlement is *undeniable*, the building technique is however very poor and local (Tomasello 2004: 215, emphasis added).

In all of the sites of the Siracusan hinterland...the evidence for a *strong* process of acculturation, which has been defined as Mycenaeanisation...is present in *every feature* of indigenous material culture (Tanasi 2009: 51, emphasis added).

The conclusion is that Nuragic metallurgy of the LBA, *so incredibly rich* in LCII/LCIII elements and connections (pottery, metallurgy, prestige objects), is the outcome of a process which began some two centuries earlier and developed throughout the period (Lo Schiavo 2001: 134, emphasis added).

Such descriptions misrepresent the meagre evidence on which they are based. They add significance to the idea of Aegean or Cypriot acculturation, and actively discourage detractors. When such challenges are raised against the dominant model of direct contact, they are quickly dismissed as extremist aberrations:

[W]hile the essentially local nature of the site of Thapsos seems to be more accepted, even without referring to the *extremist statements* of Harding, there has still been in the 90s no shortage of claims in favour of the existence of permanent settlements (Militello 2004a: 298, my translation, emphasis added).

Such exaggerations, although common in the literature, are at least relatively obvious to anyone wishing to investigate these cultural encounters: the embellished nature of the claims actually highlights them as opinions and not facts. If such interpretations were universally accepted, there would be no need to stress them so forcefully. More problematic is when this discourse of certainty converts subjective archaeological interpretations as unvarnished and straightforward facts. Take the following statement:

[In the Pantalica North period] an anaktoron is built by Aegean architects and workers (Tanasi 2005: 567).

While the first impression might be that, refreshingly, this detail has not been exaggerated (e.g. 'there is no doubt that an anaktoron was built by Aegean architects and workers'), the effect this simple statement has is actually more deceptive: it completely disguises the fact that this idea of Aegean planning and labour is in fact an interpretation for the Anaktoron (Tomasello 2004: 208), not a fact. This not only misrepresents the data, just as the above examples of exaggerated certainty do, it does it in such a way that it becomes difficult for those not intimately familiar with the evidence to realise the statement is subjective. This is arguably the most significant problem with a discourse of certainty: the potential to lead other researchers astray, even to the point of basing their own contact models upon the certainty of Aegean presence and influence in the central Mediterranean. For example, the attempt to incorporate the limited Aegean materials from the Iberian peninsula into a Mycenaean 'world system' framework has been based upon an assumption of the presence of permanent Mycenaean communities in the central Mediterranean (Martín de la Cruz and Lucrena Martín 2002: 154-55). When this 'certain' presence is removed, the interpretation of an Iberian periphery falls apart.

Instead of resorting to overt claims of Aegean-ness, and misleading expressions of certainty designed to marginalise contrary opinion, proponents of Aegean acculturation and direct foreign presence could state their case with caution, highlighting the line between objective data and subjective opinion more clearly. In fact, a more honest representation of their acculturation model is potentially more convincing in its lack of insistence. In the following two sections, I offer my own, more general and inclusive synthesis on the nature of cultural encounters in Sicily and Sardinia, without resorting to misplaced terminology, or inappropriate expressions of certainty. The result is a framework for analysis that can accommodate the direct presence of foreign agents, but is not conceptually restricted to requiring it.

6.2 Sicily without Mycenae

If the work of L. Bernabo Brea...has stressed the importance of diffusionist processes, ample possibilities remain for different or complementary prehistories of Sicily...in which more prominence is given to local developments and identities, multiple causes of change...and convergences that are not simply due to movements of people (Leighton 1999: 6).

We know that during the MBA and LBA, foreign materials arrived in Sicily. Such materials originated in peninsular Italy, Malta, Sardinia, the Aeolian Islands, mainland Greece, the islands of the Aegean, Cyprus, and the Baltic region. Some objects may have

come from as far afield as Iberia or the Levant, although the provenience of such objects is still too uncertain to claim as evidence of a connection. These objects must have come by sea, although the identity of the sailors and maritime merchants involved remains a matter of probabilities. As Sicily is an island, with coastal settlements dating to this period, islander mobility in the form of local ships must be considered as at least one, if not the main conduit of exchange. Harding's (1984: 282) suggestion that eastern Mediterranean imports to Sicily could have been imported from Italy or the Aeolian Islands via local systems of exchange is still a plausible interpretation for the presence of such objects on the island, although it need not be the only one. Certainly a site such as Thapsos, well positioned on the east coast to exploit middle and long range contacts, seems to have set up an infrastructure that could accommodate larger boats coming directly from the Aegean or elsewhere. The restricted amount of evidence, however, would seem to negate the possibility of any systematic direct trade.

The distribution pattern for eastern materials in Sicily, particularly when compared to the amounts encountered in southern Italy, seems to indicate that the island sat at one remove from systematic contact with the east. Blake's (2008: 16) idea that Sicily received whatever remained after the mainland centres had been visited (i.e. following a Braudelian 'tramping' model), could certainly explain the drop-off in imported Late Helladic ware between the two regions, although it presupposes an Aegean ship performing all of the distribution, and is unnecessarily dismissive of Sicilian consumers, who would only have had the 'dregs' of trade from which to chose. If Harding's suggestion regarding local systems of exchange is correct, Aeolian or southern Italian ships coming to Sicily would have contained a variety of goods, not just Late Helladic pottery that did not 'sell' in Italy. If they expected quality in return, they would have had to provide commodities desirable to Sicilian consumers. The same holds for any Sicilian ships venturing to the Aeolian Islands or to the mainland: they would not have exchanged their cargo for the trade leftovers of these Apennine centres if they lacked sufficient value as tradable commodities, or if there were a greater variety of Aegean goods available. On the mainland, these Sicilian entrepreneurs could have directly exchanged with Aegean maritime merchants as well.

Late Helladic pottery does not inherently signify a process of acculturation. The occurrence of this pottery in Sicilian tombs, compared to its domestic context on the mainland, has contributed to the notion that Sicily became 'Mycenaeanised' while Italy did not (La Rosa 2004: 36). Such a notion, however, is neither intuitive nor convincing, and ignores the situation in the central and western parts of the island, where such pottery is

found in non-funerary contexts. There seems to have been no generic value given to imported pottery of any kind in Sicily; function or prestige for these wares was likely determined by the specific consuming community. Placing Late Helladic pottery in a tomb may speak of a certain status granted to these objects, which were rarer and thus potentially regarded as more 'exotic' than they would have been in southern Italy. Still, there is nothing that allows us to speak of a greater value given to Aegean pottery than Maltese pottery, or to specialised local forms (dipper cups, pedestal basins), both of which were also placed in tombs. Alberti's (2006) attempt to formulate a narrative of developing social hierarchy at Thapsos seems like a step in the right direction, where the presence of imported materials in the tombs may have social implications for individual islander's identities (e.g. describing particular classes), but not for corporate identities (i.e. Mycenaeanised Sicilians). The data set he has to work with, however, is extremely partial. As van Wijngaarden (2002: 234) properly pointed out, there is no clear connection between the presence of imported objects and the architectural elaboration in the Thapsos burials, and therefore no independent way of assessing social rank distinctions between tombs that had foreign pottery, and those that did not.

Interpretations of Aegean influence read into local pottery, some metallurgy, and architectural features, are by necessity subjective. Even when I personally – and subjectively – agree with a particular interpretation of influence (e.g. Pantalica North facies strainer-spouted jugs that seem clearly based on eastern prototypes – Tanasi 2004: 338), the question of how such influence was transmitted is still ambiguous. The need for the direct presence of eastern Mediterranean agents, however, should not been seen as a prerequisite for the reception of influences, and their re-interpretation in Sicilian material culture. For many influences, such as those believed to have led to Aegean derivative pottery at Thapsos, access to a finished product was surely sufficient exposure for Sicilian potters. Architecturally, the interpretation of Aegean and Cypriot presence whenever a right angle is encountered seems hopelessly broad. While Thapsos' central complexes represent dramatic – and unique – departures from Sicilian architectural and organisational norms, it is problematic to interpret the presence of eastern architects based solely on their foundations. The surviving remains are not that much more organisationally complex than the northern habitation zone compounds, even if they are formally quite different, and speak of a different aim in construction. If, as was suggested in Chapter Five, these complexes were built for the interaction of locals and visiting traders, and were in fact an expression of greater formality designed to attract such visitors, then it is not unreasonable to propose that outside opinion was sought in their construction. Such information,

however, need not have come from specialist foreign architects, and the local construction techniques employed in the complexes are more likely to indicate local agency and decision making. Furthermore, the notion that contact with eastern Mediterranean peoples inspired urban development at Thapsos is too broad an interpretation, based on the restricted amount of actual exotica at the site, and the uncertainty of any foreign presence. The term 'proto-urban' is itself unusual: why does it matter that Thapsos 'could have become' an urban centre if it never actually did? I believe this 'proto-' prefix, aside from allowing a more liberal interpretation of urbanisation, is used as a self-fulfilling prophecy at Thapsos. The site was 'on the way' to urbanisation, when contact with the eastern Mediterranean was interrupted. In the absence of this eastern connection, believed to be responsible for promoting complexity at Thapsos, a retreat to egalitarian simplicity was inevitable (Leighton 1996b).

For the west of the island, a general fall-off in eastern Mediterranean imports would seem to indicate secondary exchange systems were employed, which re-distributed extrainsular objects that arrived to eastern Sicilian ports. The key exception is Cannatello, whose assemblage of foreign pottery is more numerous and variegated than that of Thapsos. The possibility of eastern Mediterranean ships visiting its now missing port, therefore, cannot be dismissed out of hand, although as with Thapsos, the relatively small amount of imported Aegean or Cypriot pottery would not have required a direct eastern presence. Moreover, the idea that Cannatello was a Cypro-Mycenaean emporium is untenable. The hypothesis that Maltese and Sardinian sailors were attracted to the site because of the availability of eastern Mediterranean goods is conceivable (Tanasi 2008: 85), although it would be equally valid to represent this relationship the opposite way: Aegean and Cypriot traders were attracted to Cannatello as a convenient 'international' emporium, where Maltese and Sardinian goods could be obtained without having to venture directly to those islands. In any case, the predominance of local materials and features makes the inland site of Cannatello almost certainly a local one, albeit one with a unique circular plan. This unusual plan is not directly credited to the imitation of foreign architectural practices, even by those who promote a Mycenaean emporium interpretation. It might, therefore, speak of a unique function for this site, positioned to act as secured storage for the bi-directional movement of goods – local materials (alum, sulphur) coming from the interior valleys, and extra-insular ones coming by sea. The very partial excavation of the site, however, makes an overall functional analysis of Cannatello quite difficult. There is no reason, however, to believe in any kind of foreign management over the movement of goods through the site or its territory.

Espousing a Mycenaean 'world system,' in which Sicily was exploited by a more complex Aegean society, hungry for its raw materials, is problematic. Not only are such materials rather conjectural in Sicily, the ability of Aegean maritime agents to exploit local societies far from home seems unlikely. Despite questionable proposals for a Mycenaean 'thalassocracy,' the average Aegean seaman was not a particularly influential or highstatus figure (Dickinson 1994: 253-54; Manning and Hulin 2005: 271). For such a system to exist pre-supposes much more direct involvement of the Mycenaean palaces than is usually envisioned (Militello 2005). To do business with communities like Thapsos or Cannatello likely meant to conform to the expectations of those living there. While certain raw materials like alum, sulphur, or salt may have been possible Sicilian goods exchanged for extra-insular objects, because there was no systematic contact with the eastern Mediterranean, there is no need to propose any specific trade aim. Trade itself may have been the aim (in Sicily, or anywhere else in the central Mediterranean), which certainly fits in with the tramping vessels, and interlocking exchange spheres model proposed in Chapter Five. Rather than long-distance, directional trade as the norm, it is more likely that – just as in other periods of Mediterranean maritime history – tramping (or *cabotage*) represented the primary means of object diasporas within the central Mediterranean. Smaller ships would have visited a greater variety of large and small ports, and exploited the "routes within routes" (Horden and Purcell 2000: 140) that the occasional large boat could not. Ultimately, any vessels coming from the east to Sicily may have been satisfied with acquiring whatever they felt had an exchangeable value elsewhere on their route (Militello 2005: 595).

It is becoming clear that Sicily had consistent contact with Malta throughout the MBA and LBA. This connection is more materially evident than any with the eastern Mediterranean, and is represented along both the southern and eastern coasts of the island. A direct relationship between the two islands is almost a certainty: there are no geographic intermediaries between them. The idea that the small island of Ognina, situated about 200m off the east coast of Sicily (just to the south of Plemmyrion), was a Maltese colony (Bernabò Brea 1966) is intriguing, although not currently substantiated by the amount of Maltese material recovered there (Tanasi 2008: 50-51). While contact between these islands has been framed within a Sicilian-Maltese-Aegean network (Tanasi 2008: 7), this seems an unnecessarily narrow hypothesis. It is more likely that cultural encounters between Sicily and the Maltese Archipelago were longer lasting than any Aegean connection, and were not confined to motivations that emphasise the availability of eastern Mediterranean goods. Militello's suggestion (2004a: 328), that the more consistent Maltese

connection to Thapsos represented the principal interaction sphere for the inhabitants of that port, is a valid proposal, and qualifies any notion of Mycenaeanised residents at Thapsos.

Sardinian connections are still surprisingly weak for MBA and LBA Sicily. If scholars wish to place both of the major islands as important links in a metals-seeking eastern Mediterranean network, it is odd that the material exchange between the two islands is scarcely represented. Even when such eastern-focussed studies tend to minimise Sicilian or Sardinian mobility networks, the fact that the Aegean or Cypriot routes are customarily characterised as systematic should yield more of an incidental exchange between these islands. The present study, though, challenges any Aegean or Cypriot presence in Sardinia, and proposes that eastern connections on that island are better thought of as being mediated through the Italian mainland (see below). Still, this does not explain a lack of contact between Sicily and Sardinia in terms of local or regional networks. There are two obstacles at work here, however, that may be restricting our knowledge of Sicilian-Sardinian encounters. The first is a lack of specialists in both Sicilian and Sardinian material culture (especially pottery), which prevents a connection from being detected in the first place. The history of investigations at Cannatello is instructive here, where Aegean and Cypriot material was identified long before Sardinian or Maltese pottery at the site. While Maltese pottery is fairly distinctive, however, and relatively easy to identify as sherds, Nuragic pottery is not, and investigators of the ceramic evidence from Cannatello feel there is probably a significant amount of Sardinian pottery that has gone unrecognised, because they require a rim or base sherd to make a positive identification (S. Levi pers. comm.). The second problem is the lack of investigation in the west and north of Sicily, the two most proximate regions to Sardinia, and therefore, areas that might have had conspicuous contact with the island. While the north coast has few natural harbours (e.g. around Palermo), there have been a few MBA and LBA interior sites found, some of which have yielded imported materials. Further investigation of these areas may well help to fill in the gaps in Sicilian-Sardinian material connections.

As for the western Mediterranean, material connections between Sicily and the Iberian Peninsula have still only been tentatively suggested. While we might not expect such a connection to be as significant as that between Sicily and Malta, or Sicily and Sardinia (and may, in fact, have been mediated through that island), the few indications of Iberian materials in Sicily seem to indicate that the island represented an eastern frontier of interlocking Atlantic-Mediterranean networks. Particularly striking is the occurrence of flat

trunnion axes in both areas. Even if we accept an Aegean or Anatolian source for the form, their more conspicuous presence in Sicily and the Iberian Peninsula more likely reflects communication between the central and western Mediterranean, independent of the trunnion axe's origins. Cultraro's (2005: 101) supplementary evidence of similar pottery forms in eastern Iberia and western Sicily (Mokarta), is an important early step in trying to define such a connection, although it is still based on a comparison of drawings of these pots, and as such, represents a rather preliminary interpretation.

6.3 Sardinia without Cyprus

On the weight of existing evidence, it seem[s] most reasonable therefore to view LBA long-distance trade less in terms of a well-established, commercial and formal system expressed in the terms 'international emporium' or 'gateway community'...and more in terms of sporadic contacts with coastal landings or even wrecked vessels – points from which exotic goods travelled inland via a less formal, down-the-line pattern of trade, perhaps mainly but certainly not exclusively among elite residents of the larger Class II and III settlements (Webster 1996: 142).

Recent research of extra-insular connections in MBA and LBA Sardinia has shown that Webster's sixteen year old characterisation is largely still valid. Its main shortcoming is that such a representation of the situation in Sardinia seems too restricted in only engaging with the occasional foreign ship coming to Sardinia, and does not consider the Sardinian mobility potential in Tyrrhenian maritime networks. Lo Schiavo (2008: 245; 2003; 2001: 141) has been a more vocal proponent for the need to recognise Nuragic shipping as a possible, if not probable, conduit of exchange. In the more inclusive model proposed here, Sardinians should certainly be thought of as active mariners in the exchange of goods around the Tyrrhenian Sea, and west to the Iberian coasts. The ever-growing corpus of Sardinian materials found overseas, in Sicily, Lipari, Crete, and now Cyprus (see below) in the LBA, and in Italy and Spain by at least the Early Iron Age, should not be explained restrictively as a consequence of Aegean, Cypriot, or Phoenician commercial expansion. The idea that eastern Mediterranean prospectors were looking for access to Sardinian ores is still unproven archaeologically. Whatever the basis for such arguments in the Iron Age (which have also been challenged – see van Dommelen 1998: 74-75), there is no correlation between the presence of foreign objects at any Nuragic site, and involvement in intensified metallurgical activity for export during the LBA (Webster 1996: 142).

Islander encounters with Cyprus still represent the most contentious and problematic issue in studies of Sardinian culture contact. While the conspicuous presence of oxhide

ingots around the island may inevitably reflect a Cypriot desire to direct surplus copper westward (Knapp 1990: 151), this still cannot be related directly to any Cypriot presence and activity in Sardinia. Even the most strident proponents of Cypriot activity on the island acknowledge that the archaeological evidence for a settled Cypriot presence is weak, and the notion that Sardinian smiths received training or supplies in Cyprus (Lo Schiavo 2001: 141) is currently only supported by the recent discovery of a Sardinian storage jar (dolio) in Pyla Kokkinokremmos (Knapp, pers. comm.). Nonetheless, the relatively large amount of oxhide ingot evidence in Sardinia, compared to its scarcity in Sicily and Lipari, and complete absence on mainland Italy, remains an unresolved issue, and an interpretive obstacle to the suggestion (supported here) that Cyprus simply exported its surplus copper generically west, without any particularly specific destination markets in mind. Even if the Italian peninsula was initially bypassed when this bulk copper was circulated to the west, it is equally strange that we lack any oxhide ingot fragments in Italy as a result of subsequent contact with Sardinia. It may be simply an archaeological quirk that the evidence has not been preserved, or has yet to be found in Italy, although this is as unsatisfying a conclusion as the assumption of direct Cypriot presence in Sardinia. Whether or not a Cypriot presence in Sardinia is ever confirmed, the resulting material connection should not be proposed as a narrative of advanced Cypriot metallurgists or prospectors coming to Sardinia to educate backward local smiths, but rather one of two areas that shared a tradition of extracting copper and producing bronze, leading to an exchange of technologies and information (Knapp 1990: 137). As mentioned in Chapter Four, being involved in metallurgy meant being involved in mobility networks. In such a light, the lack of any information exchanges between the two main Mediterranean islands involved in the primary smelting of copper would be unusual.

Contact between Sardinia and the mainland, a connection that has been argued to exist for the site of Antigori, is admittedly largely based on circumstantial patterns of pottery consumption (i.e. the shared pattern of Late Helladic imports, locally made imitations, and local grey wares) rather than a more satisfying corpus of LBA Sardinian objects in Italy, and clear, unambiguous Sub-Apennine materials in Sardinia. As with the under-represented material connection between Sicily and Sardinia, however, the lack of convergent familiarity with both Italian and Nuragic material culture may contribute to this gap in evidence. There are also chronological problems, with uncertainty over whether encounters between Sardinia and Tyrrhenian Italy should date to the end of the Bronze Age or to the Iron Age (Lo Schiavo 1985c: 12-13; 2003: 23). The fact that both Italian and Sardinian pottery has been found together in LBA contexts in Kommos (Watrous *et al.*

1998) indicates that, somewhere within the exchange system, Sardinian and Italian networks overlapped before the Early Iron Age. Antigori represents an unusual situation in Sardinia, as the only site that has yielded a significant amount of Late Helladic pottery. It is tempting to propose that the elites of the nuraghe attempted to make Antigori an (unsuccessful) gateway community for the distribution of Late Helladic pottery to their hinterland, even to the extent of producing it locally: almost all other finds of Sardinian-made Aegean-looking pottery are found in southern Cagliari. This is only indicated by six sherds scattered at four sites however; if they were all made at or near Antigori, they may also represent gift exchanges between nuraghe dwellers. While it is tempting to suggest an imported or hybrid practice of feasting at Antigori, associated with the imported Aegean pottery and grey ware, not enough is currently known about traditional Sardinian feasting or dining practices to determine what constitutes a local practice, and what is an adopted one.

Hardly represented at all are Sicilian objects in Sardinia. As mentioned above in the Sicilian synthesis, contacts between the two largest Mediterranean islands may be underrepresented due to restricted knowledge of indigenous assemblages. Furthermore, the objects that have been found (fibulae, axes, amber) are not unambiguously Sicilian. There has been more study of Sardinia and the western Mediterranean than for Sicily and the west, although like Sicily, more work is needed here to identify the full range of connections. At present, almost all western materials in Sardinia are represented by bronze tools or weapons. It is possible that Sardinia's encounters with the Italian mainland, Iberia, or the Atlantic were predicated upon the trade of bronze objects, and perhaps of raw copper as well. Again, the lack of other recognised imports, especially pottery, could be due to the hyper-specialisation of archaeologists working in Sardinia, Italy, Portugal, and Spain: the general unfamiliarity with indigenous materials in these areas (beyond bronzes) contributes to a dearth of recognised culture contacts. Giardino's (1995: 249) suggestion of ceramic technology exchanges (i.e. regarding burnishing techniques) between Sardinia and southwestern Spain and Portugal, and the more recent discovery of Nuragic pottery in Huelva (south-west Spain) (Fundoni 2009), are encouraging signs that the scarcity of western material connections will be redressed in the near future.

6.4 Future Research

The most pressing need in the study of the central Mediterranean during the MBA and LBA is for an independent, absolute chronology based on radiocarbon or

dendrochronological determinations, and an independent relative sequence of local pottery styles, not dated by casual associations with Late Helladic pottery. A relative sequence has been initiated for Nuragic pottery, but its refinement and absolute range (independent of the association of LH IIIB/C pottery at Antigori) is still a work in progress. In Sicily the need is more acute, as almost all dates are dependent upon the chance finds of Aegean pottery. This has ramifications for Maltese dating as well, as the Borg-in-Nadur chronology has been based on its presence in Thapsos (Alberti 2007: 369). A more secure chronology for the central Mediterranean not only allows for greater resolution of the diachronic patterns of contact, it may help to clarify when and if interpreted foreign influences can be maintained (e.g. in the same manner that the interpretation of Aegean inspiration for *tholos* nuraghi has now been discounted).

An important step for understanding cultural encounters in Sicily and Sardinia from a more holistic perspective would be to incorporate data from other key parts of the central Mediterranean. This would be particularly useful in areas that have shown evidence of conspicuous contacts during the MBA and LBA, such as the Aeolian Islands and southern Italy, but should also include areas that are considered to be largely out of the stream of wider Mediterranean material connections (e.g. Ustica, Malta, and Corsica), to see if any predictive models of connectivity or insularity – told from the local point of view – can be derived. Some of these areas have also been argued to represent a direct Aegean presence (e.g. Lipari – Leighton 1999: 181), and a closer examination of the relevant materials, contextually and numerically, should be undertaken to assess whether such an interpretation is appropriate. The hybridisation interpretation proposed for certain materials in Sicily in Chapter Five could potentially shed light on some of the material changes that occur in these areas during the Middle and Late Bronze Age, of which wheelmade *ceramica grigia* pottery in southern Italy (Vagnetti 1999: 143-46) is an obvious candidate.

Pottery and other central Mediterranean objects found in other parts of the Mediterranean could also better inform us on cultural encounters within the region. This study has not engaged with Sicilian or Sardinian evidence found overseas, except as an indication of possible islander mobility and agency, as it lies outside of the local consumption perspective advocated here. A distributional and contextual analysis of such materials (e.g. Nuragic pottery in Crete and Cyprus, a Thapsos-Pertosa sword among the cargo of the Uluburun wreck) could allow for a more rounded discussion of the probabilities and scales of islander mobility networks, and counteract the impression of stationary, receptive islander communities, who had nothing to offer besides convenient

geographic reference points, or certain raw materials. The amount of Sicilian or Sardinian data found overseas is still quite small, and no doubt this contributes to the false impression of static, insular communities. The recent discovery of a Thapsos facies pot in the Levant (M. Bettelli, *pers. comm.*), however, fortuitously observed by a scholar who happened to know what it was, represents an exciting glimpse at what evidence may be out there. If Sicilian and Sardinian mobility was more widely proposed, or at least recognition of potential Sicilian and Sardinian object diasporas was considered, then the *ex Oriente lux* perspective that still characterises culture contact studies in the Mediterranean could be more readily challenged. The idea that central Mediterranean products could be considered as desirable to the more complex east, however, is still largely anathema.

Enumerating and analysing western Mediterranean connections is a difficult task. This study has begun to tease out existing references of connections between Sicily and Sardinia and the west, although such a compilation is almost certainly incomplete. Such connections are not nearly as often, nor as widely, published: it is much easier to find (several) different catalogues describing Aegean and Cypriot materials in these islands (e.g. Vianello 2005; Tusa 2000b; Smith 1987; Lo Schiavo *et al.* 1985). To redress this imbalance, greater communication between scholars working on regional assemblages in the central and western Mediterranean should be encouraged. An online database of potential connections, and material enquiries, which is accessible to, and in some instances, editable by such scholars, would go a long way in detecting these connections, and counteracting the hyper-regionalisation endemic in Mediterranean archaeology (Cherry 2004: 236).

Sicilian sites are often slowly and selectively published by their principal investigators, and few actually yield final reports. As there have been few MBA and LBA settlements discovered in the first place, fuller publication of this handful of known sites would be especially useful, particularly for the establishment of relative ceramic sequences based on comparable stratigraphies. There also needs to be more provenience analyses of foreign-looking pottery in Sicily. Although the current, circumscribed analysis of Aegean-looking pottery has indicated Peloponnesian imports (Jones and Levi 2004), it would be intriguing if further analysis also showed that some of the 'imported' Late Helladic ware had actually been made in southern Italy (i.e. a closer production centre). This would lend credence to the suggestion that contact with Aegean was occasionally mediated through the mainland. Fuller provenience analyses may still indicate a majority of the Sicilian data

were 'proper' Aegean imports, however, as LH IIIB pottery (i.e. the date of most Italian-made Aegean-looking vessels) is not as common in Sicily as LH IIIA.

6.5 Final Conclusions

The synthesis of cultural encounters in Sicily and Sardinia outlined above has attempted to be an inclusive, rather than a minimalist, reading of the evidence. While the impact of eastern Mediterranean contact should be heavily qualified due to the restrictive and ambiguous nature of the evidence, there has also been recognition that contact, even if with finished products rather than people, could have inspired local material responses and, in discrete places, possible changes in social practice as well. At certain key sites direct contact with eastern Mediterranean agents is still a viable interpretation: Thapsos is clearly the best candidate for such a connection. The consumption-based approach advocated here can accommodate an Aegean or Cypriot presence in the central Mediterranean, although it does not rely upon it, and the interpretations of material hybridisation proposed do not require direct contact to be valid. Regardless of whether contacts were direct or not, however, islander communities appropriated foreign objects and influences, and recontextualised them to accommodate local consumptive needs, and local systems of value. They were not attempting to become more Mycenaean or Cypriot.

Researchers can still look at these cultural encounters from the foreign perspective, so long as the subject of study is trade routes, the spread of Aegean or Cypriot material culture in general, or any impact that contact with these islander communities had upon eastern societies. Bietti Sestieri's (1988: 23-24) comment that those studying the Late Bronze Age in the Aegean tend to emphasise the "role of indigenous Italian communities" in any central Mediterranean encounters, however, is an important proviso. When the basis for study is an analysis of material and social changes within Sicily or Sardinia, a narrow focus on the agency of extra-insular peoples becomes unsatisfying. Furthermore, this study does not advocate replacing eastern Mediterranean connections with central or western ones, in some ill-conceived attempt to 'rank' the potential impact of different contacts upon islander societies. Central and western connections have been stressed here to acknowledge that they existed in the MBA and LBA, and should be given consideration alongside eastern connections, as well as to put Sicily and Sardinia into a more representative central Mediterranean context (i.e. they were not simply the western edge of an eastern trade and prospection network). When it comes to characterising the developments of islander societies, however – as has been done for Cyprus, using a

methodology that shuns a description of that island's development in terms of Mycenaean or Near Eastern influences (Knapp 2008) – it is of primary importance to foreground local materials, local values, and local needs in any assessment of extra-insular impact. This applies equally if contacts are believed to have been with more complex societies, or with those at a more comparable level of socio-political development, in a pre-colonial setting.

Yielding extra-insular evidence from several parts of the wider Mediterranean world, Sicily and Sardinia were islands securely within the stream of material connections during the Middle and Late Bronze Age. While each produced a unique and dynamic material identity, their material cultures did not develop from any process of insularity. In fact, in some cases conspicuous connectivity contributed to the promotion of traditional islander identities, through a process of selective appropriations and rejections. Although contacts were certainly not as consistent, direct, or intense as those associated with 1st millennium BC colonial movements, and could not have produced significant changes in the broader corporate identities of Sicilian or Sardinian societies, they were frequent enough to have had an impact on the material productions, and perhaps social practices, of particular islander communities in localised situations. This is a recurring theme throughout much of prehistory in the Mediterranean, a sea that has represented a place of passage between disparate regions, and which "has always been as enabling as it was corrupting" (Knapp 2001: 335).

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